

CITY OF BLACKFOOT (PWS 6060007) SOURCE WATER ASSESSMENT FINAL REPORT

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State of Idaho Department of Environmental Quality

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Executive Summary

Under the Safe Drinking Water Act Amendments of 1996, all states are required by the U.S. Environmental Protection Agency (EPA) to assess every source of public drinking water for its relative sensitivity to contaminants regulated by the act. This assessment is based on a land use inventory of the designated assessment area and sensitivity factors associated with the wells and aquifer characteristics.

This report, *Source Water Assessment for the City of Blackfoot, Idaho*, describes the public drinking water system, the boundaries of the zones of water contribution, and the associated potential contaminant sources located within these boundaries. This assessment should be used as a planning tool, taken into account with local knowledge and concerns, to develop and implement appropriate protection measures for this source. **The results should not be used as an absolute measure of risk and they should not be used to undermine public confidence in the public water system (PWS).**

The City of Blackfoot (PWS # 6060007) is a community water system located in Bingham County (Figure 1). The drinking water system consists of nine ground water sources. However, due to past tetrachloroethylene (PCE) contamination with concentrations well above the maximum contaminant level (MCL), Well #4 has been physically disconnected from the system. Although the well's capture zone was delineated a susceptibility analysis was not performed because the well is not connected to the culinary water system. The wells serve approximately 9,600 persons through 3,410 connections.

Each of the delineation maps for the nine city wells encompasses slightly different corridors that extend through the city limits and some toward the City of Idaho Falls. Therefore, each source has a different number of potential contaminant sources. Some of the potential contaminant sources located within the delineation capture zones include aboveground storage tanks (ASTs), underground storage tanks (USTs), leaking underground storage tanks (LUSTs), dairies, sand and gravel pits, and landfills. Also found were sites regulated under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), the Resource Conservation Recovery Act (RCRA), the Superfund Amendments and Reauthorization Act (SARA), the National Pollutant Discharge Elimination System (NPDES), and the Toxic Release Inventory (TRI.) Other sources identified that may contribute to the overall vulnerability of the water sources were businesses within the delineated areas that may be considered potential contaminants sources and the extensive irrigation canal systems. In addition, deep injection wells (Injection wells regulated under the Idaho Department of Water Resources generally for the disposal of stormwater runoff or agricultural field drainage), Group 1 Sites (sites that show elevated levels of contaminants and are not within the priority one areas), and recharge points (active, proposed, and possible recharge sites on the Snake River Plain) were found within the wells' delineations. A complete list of potential contaminant sources is provided with this assessment (Attachment A).

For the assessment, a review of laboratory tests was conducted using the State Drinking Water Information System (SDWIS). Coliform bacteria were detected at various sample locations in the distribution system. In April 1996, fecal coliform was detected at Well #3 and in the distribution system. In August 2002, coliform bacteria were detected in Well #9. Since August 2002, coliform bacteria have not been detected in Well #9 or in the distribution system. The inorganic chemicals (IOCs) arsenic, barium, cadmium, chromium, fluoride, mercury, nitrate, and selenium have been detected in the water samples taken from the City of Blackfoot wells. Arsenic was recorded in Well #5, Well #6, Well #7, Well #8, and Well #9 with concentrations ranging from 0.001 milligrams per liter (mg/L) to 0.007 mg/L. In October 2001, the EPA lowered the arsenic MCL to 0.01 mg/L, giving systems until 2006 to comply with the new standard. Nitrate concentrations range from 0.55 mg/L to 3.56 mg/L. No synthetic organic chemicals (SOCs) have been detected in the drinking water. The volatile organic chemical (VOC) PCE (MCL is 0.005 mg/L) has been identified in Well #6 with concentrations ranging from 0.0006 mg to 0.0035 mg/L between the years of 1993 and 1996. These samples were below the MCL for PCE. Subsequent samples have not detected PCE in the water of Well #6.

Final susceptibility scores for the City of Blackfoot wells were derived from equally weighted system construction scores, hydrologic sensitivity scores, and potential contaminant/land use scores. Therefore, a low rating in one or two categories coupled with a higher rating in another category results in a final rating of low, moderate, or high susceptibility. With the potential contaminants associated with most urban and heavily agricultural areas, the best score a well can get is moderate. Potential contaminants are divided into four categories: IOCs, VOCs, SOCs, and microbial contaminants. As different wells can be subject to various contamination settings, separate scores are given for each type of contaminant.

For Well #3, Well #6, Well #7, Well #8, Well #9, and Well #11 the final susceptibility scores rated high for IOCs, VOCs, SOCs, and microbials. For Well #10, final susceptibility scores were moderate for all contaminant categories. For Well #5, final susceptibility scores were high for IOCs, and moderate for VOCs, SOCs, and microbials.

The capture zones for Well #7, Well #9, and Well #11 intersect a priority area for the SOC atrazine. The capture zones for Well #6, Well #8, and Well #10 intersect a priority area for the VOC PCE. The organic priority areas are areas where greater than 25% of the wells show levels greater than 1% of the primary standard or other health standards. The capture zone for Well #7 intersects a priority area for the IOC nitrate. The nitrate priority area is where greater than 25% of the wells show nitrate values above 5 mg/l.

This assessment should be used as a basis for determining appropriate new protection measures or re-evaluating existing protection efforts. No matter what ranking a source receives, protection is always important. Whether the source is currently located in a “pristine” area or an area with numerous industrial and/or agricultural land uses that require surveillance, the way to ensure good water quality in the future is to act now to protect valuable water supply resources. If the system should need to expand in the future, new well sites should be located in areas with as few potential sources of contamination as possible, and the site should be reserved and protected for this specific use.

An effective drinking water protection program is tailored to the particular local drinking water protection area. A community with a fully developed drinking water protection program will incorporate many strategies. For the City of Blackfoot drinking water protection activities should continue efforts in keeping the water system free of contaminants that may affect the drinking water. If microbial problems arise and/or continue, the system may want to consider the addition of a disinfection system. If concentrations of PCE tested approach or exceed the MCL level, the system should take appropriate measures to treat the water source.

In addition, drinking water protection activities should focus on correcting any deficiencies outlined in the sanitary survey (an inspection conducted every five years with the purpose of determining the physical condition of a water system's components and its capacity). The wells should maintain sanitary standards regarding wellhead protection. Also, any new sources that could be considered potential contaminant sources in the wells' zones of contribution should also be investigated and monitored to prevent future contamination. No potential contaminants (pesticides, paint, fuel, cleaning supplies, etc.) should be stored or applied within 50 feet of the wells. Land uses within most of the source water assessment area are outside the direct jurisdiction of the City of Blackfoot. Therefore, partnerships with state and local agencies, and industrial and commercial groups should be established to ensure future land uses are protective of ground water quality. Educating employees and the public about source water will further assist the system in its monitoring and protection efforts.

Due to the time involved with the movement of ground water, drinking water protection activities should be aimed at long-term management strategies even though these strategies may not yield results in the near term. A strong public education program should be a primary focus of any drinking water protection plan. Public education topics could include household hazardous waste disposal methods, proper lawn and garden care, and the importance of water conservation to name but a few. There are multiple resources available to help water systems implement protection programs, including the Drinking Water Academy of the EPA. Drinking water protection activities for agriculture should be coordinated with the Idaho State Department of Agriculture and the Bingham County Soil and Water Conservation District. As major transportation corridors intersect the delineation (such as Highway 26, Highway 91, and Interstate 15), the Idaho Department of Transportation should be involved in protection efforts.

A system must incorporate a variety of strategies in order to develop a comprehensive drinking water protection plan, be they regulatory in nature (e.g. zoning, permitting) or non-regulatory in nature (e.g. good housekeeping, public education, specific best management practices). For assistance in developing protection strategies please contact the Pocatello Regional Office of the Idaho Department of Environmental Quality (DEQ) or the Idaho Rural Water Association.

SOURCE WATER ASSESSMENT FOR CITY OF BLACKFOOT, IDAHO

Section 1. Introduction - Basis for Assessment

The following sections contain information necessary to understand how and why this assessment was conducted. **It is important to review this information to understand what the ranking of this source means.** A map showing the delineated source water assessment area and the inventory of significant potential sources of contamination identified within that area are attached. The list of significant potential contaminant source categories and their rankings used to develop the assessment also is attached.

Level of Accuracy and Purpose of the Assessment

The DEQ is required by the U.S. Environmental Protection Agency (EPA) to assess the over 2,900 public drinking water sources in Idaho for their relative susceptibility to contaminants regulated by the Safe Drinking Water Act. This assessment is based on a land use inventory of the delineated assessment area, sensitivity factors associated with the wells, and aquifer characteristics. All assessments must be completed by May of 2003. The resources and time available to accomplish assessments are limited. Therefore, an in-depth, site-specific investigation to identify each significant potential source of contamination for every public water supply system is not possible. **This assessment should be used as a planning tool, taken into account with local knowledge and concerns, to develop and implement appropriate protection measures for this source. The results should not be used as an absolute measure of risk and they should not be used to undermine public confidence in the public water system (PWS).**

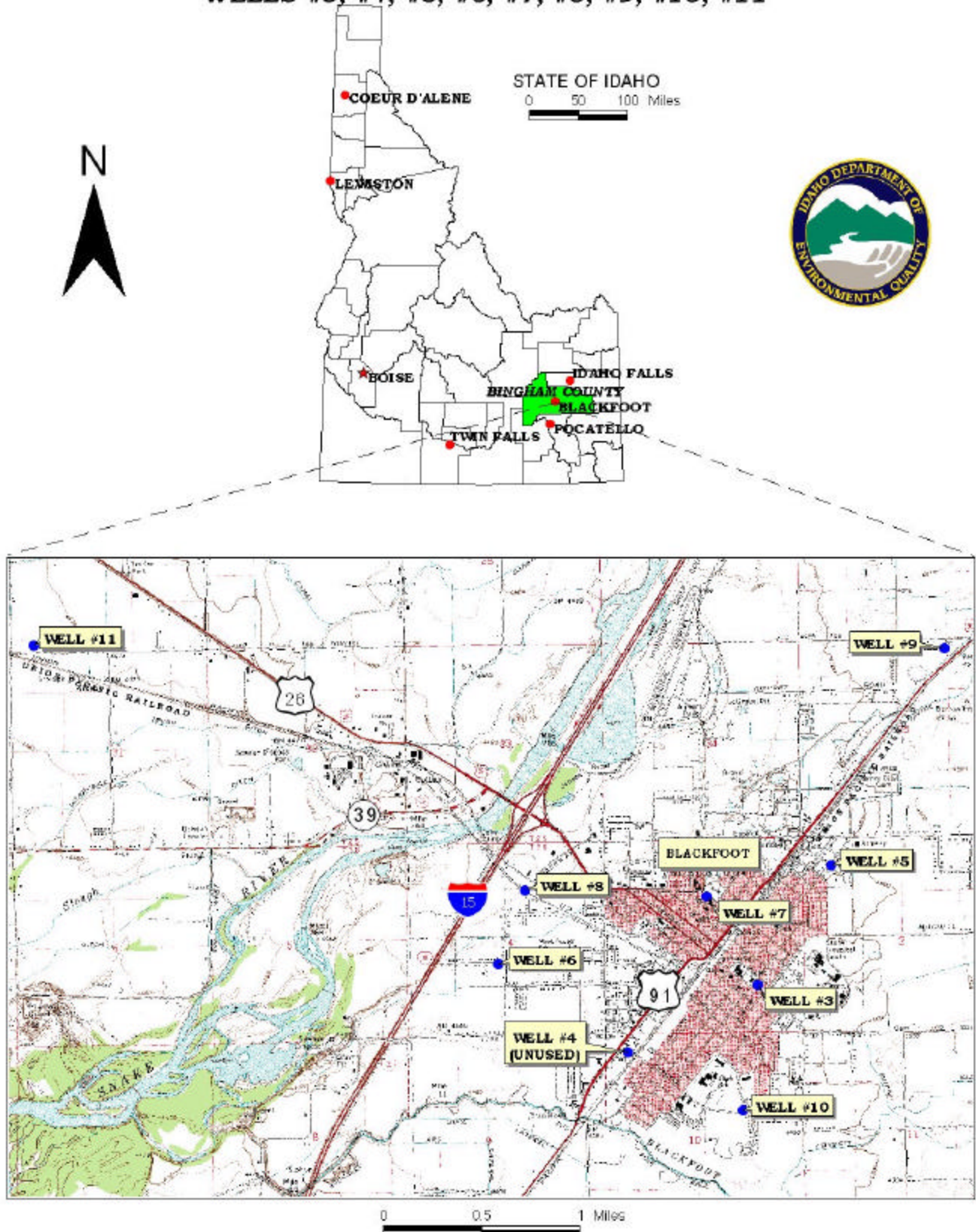
The ultimate goal of the assessment is to provide data to local communities to develop a protection strategy for their drinking water supply system. The DEQ recognizes that pollution prevention activities generally require less time and money to implement than treatment of a public water supply system once it has been contaminated. DEQ encourages communities to balance resource protection with economic growth and development. The decision as to the amount and types of information necessary to develop a source water protection program should be determined by the local community based on its own needs and limitations. Wellhead or source water protection is one facet of a comprehensive growth plan, and it can complement ongoing local planning efforts.

Section 2. Conducting the Assessment

General Description of the Source Water Quality

The City of Blackfoot (PWS # 6060007) is a community water system located in Bingham County (Figure 1). The drinking water system consists of nine ground water sources. However, due to past tetrachloroethylene (PCE) contamination with concentrations well above the maximum contaminant level (MCL), Well #4 has been physically disconnected from the system. The wells serve approximately 9,600 persons through 3,410 connections.

**FIGURE 1. Geographic Location of the City of Blackfoot: 6060007
WELLS #3, #4, #5, #6, #7, #8, #9, #10, #11**



Coliform bacteria were detected at various sample locations in the distribution system. In April 1996, fecal coliform was detected at Well #3 and in the distribution system. In August 2002, coliform bacteria were detected in Well #9. Since August 2002, coliform bacteria have not been detected in Well #9 or the distribution system. The inorganic chemicals (IOCs) arsenic, barium, cadmium, chromium, fluoride, mercury, nitrate, and selenium have been detected in the water samples taken from the City of Blackfoot wells. Arsenic was recorded in Well #5, Well #6, Well #7, Well #8, and Well #9 with concentrations ranging from 0.001 milligrams per liter (mg/L) to 0.007 mg/L. In October 2001, the EPA lowered the arsenic MCL to 0.01 mg/L, giving systems until 2006 to comply with the new standard. Nitrate concentrations range from 0.55 mg/L to 3.56 mg/L. No synthetic organic chemicals (SOCs) have been detected in the drinking water. The volatile organic chemical (VOC) PCE (MCL is 0.005 mg/L) has been identified in Well #6 concentrations rang from 0.0006 mg to 0.0035 mg/L between the years of 1993 and 1996. Subsequent samples have not detected PCE in the water of Well #6.

Defining the Zones of Contribution – Delineation

The delineation process establishes the physical area around a well that will become the focal point of the assessment. The process includes mapping the boundaries of the zone of contribution into time-of-travel (TOT) zones (zones indicating the number of years necessary for a particle of water to reach a pumping well) for water in the aquifer. Washington Group International (WGI) was contracted by DEQ to define the public water system's zones of contribution. WGI used a refined computer model approved by the EPA in determining the 3-year (Zone 1B), 6-year (Zone 2), and 10-year (Zone 3) TOT for water associated with the East Margin Area of the Eastern Snake River Plain (ESRP) hydrologic province in the vicinity of the City of Blackfoot. A calculated fixed radius model approved by the Source Water Assessment Plan (DEQ, 1999) in determining the 3-year (Zone 1B), 6-year (Zone 2), and 10-year (Zone 3) TOT zones was used for Well #6 because there was no site-specific information available regarding the ground water flow direction or hydraulic gradient. In the case of Well #3 and Well #5 the delineations only has a 3- and 6- year TOT because the mountains are assumed to be the boundary source of the aquifer. The computer model used site specific data, assimilated by WGI from a variety of sources including well logs (when available), operator records, and hydrogeologic reports. A summary of the hydrogeologic information from the WGI report is provided below.

Hydrogeologic Conceptual Model

The East Margin Area encompasses 821 square miles, representing approximately 8 percent of the total area of the ESRP hydrologic province. The majority of the East Margin Area is within Bannock County, with small areas occurring in Bannock, Bonneville, and Power counties.

The regional ESRP aquifer is the most significant aquifer in the East Margin Area and consists primarily of basalt of the Quaternary-aged Snake River Group. However, additional water-bearing units are used for water supply along the margin of the ESRP. In order of decreasing age, the most significant aquifers in the Michaud Flats area are bedded rhyolite (volcanic rock) of the Tertiary-aged Starlight Formation and Quaternary-aged gravels of a low relief plain formed by running water (pediment), basalt of the Big Hole Formation, and stream deposits of the Sunbeam Formation (see Jacobson, 1982, p. 7, and Corbett, et al., 1980, pp. 6-10). A few shallow domestic wells in the central Michaud Flats area also are completed in Michaud Gravel, which is the shallow water table aquifer. The American Falls Lake Beds Formation (AFLB) confines the deeper aquifers and averages 80 feet in thickness in the central Michaud Flats area (Jacobson, 1984, p. 6).

The AFLB pinches out in the eastern Michaud Flats area near the Portneuf River, effectively combining the shallow and deep stream deposits into a single water table aquifer (Bechtel, 1994, p. 2-2). Other aquifers in the East Margin Area include fractured quartzite that has been developed near Blackfoot, stream deposits near the cities of Firth and Basalt.

PWS wells in the East Margin Area of the ESRP province produce water from five different aquifers: the Regional Eastern Snake River Plain aquifer, three alluvial (or stream deposited) aquifers (Eastern Michaud Flats, Firth/Basalt, and Gibson Terrace/Pocatello Bench) and a quartzite aquifer (Blackfoot). The Regional Eastern Snake River Plain Aquifer, the water source for the City of Blackfoot, is described in detail below.

Regional Eastern Snake River Plain Aquifer

The ESRP is a northeast trending basin located in southeastern Idaho. The 10,000 square miles of the plain are primarily filled with highly fractured layered Quaternary-aged basalt flows of the Snake River Group, which are between (intercalated) layers of rocks formed by sediment deposition (sedimentary) along the margins (Garabedian, 1992, p. 5). Quaternary-aged basalts are estimated to be 100 to 1,500 feet thick, with the majority of the area in the range of 100 to 500 feet thick (Whitehead, 1992, Plate 3). Individual basalt flows range from 10 to 50 feet thick, averaging 20 to 25 feet thick (Lindholm, 1996, p. 14). Basalt is thickest in the central part of the eastern plain and thins toward the margins. Whitehead (1992, p. 9) estimates the total thickness of the flows to be as great as 5,000 feet. A thin layer (0 to 100 feet) of windblown and stream-produced sediments overlies the basalt. The plain is bounded on the northeast by rocks of the Yellowstone Group (mainly rhyolite) and Idavada Volcanics to the southwest. These rocks may also underlie the plain (Garabedian, 1992, p. 5). Granite of the Idaho batholith borders the plain to the northwest, along with sedimentary rocks and rocks changed by heat and/or pressure (metamorphic) (Cosgrove et al., 1999, p. 10). The Snake River flows along part of the southern boundary and is the only drainage that leaves the plain. A high degree of connectivity with the regional aquifer system is displayed over much of the river as it passes through the plain. However, some reaches are believed to be perched or separated from the main ground water by unsaturated rock, such as the Lewisville-to-Shelley reach. Rivers and streams entering the plain from the south are tributary to the Snake River. With the exception of the Big and Little Wood rivers, rivers entering from the north vanish into the basalts of the Snake River Plain aquifer that have a higher ability to transmit water.

The layered basalts of the Snake River Group host one of the most productive aquifers in the United States. The aquifer is generally considered unconfined, yet may be confined locally because of interbedded clay and dense unfractured basalt (Whitehead, 1992, p. 26). Whitehead (1992, p. 22) and Lindholm (1996, p.1) report that well yields of 2,000 to 3,000 gal/min are common for wells open to less than 100 feet of the aquifer. Transmissivities obtained from test data in the upper 100 to 200 feet of the aquifer range from less than 0.1 square feet per second (ft^2/sec) to $56 \text{ ft}^2/\text{sec}$ (1.0×10^4 to $4.8 \times 10^6 \text{ ft}^2/\text{day}$; Garabedian, 1992, p. 11, and Lindholm, 1996, p. 18). Lindholm (1996, p. 18) estimates aquifer thickness to range from 100 feet near the plain's margin to thousands of feet near the center. Models of the regional aquifer have used values ranging from 200 to 3,000 feet to represent aquifer thickness (Cosgrove et al., 1999, p.15).

Regional ground water flow is to the southwest paralleling the basin (Cosgrove et al., 1999; deSonneville, 1972, p. 78; Garabedian, 1992, p. 48; and Lindholm, 1996, p. 23). Reported water table gradients range from 3 to 100 ft/mile and average 12 ft/mile (Lindholm, 1996, p. 22). Gradients steepen at the plain's margin and at discharge locations. The estimated effective ratio of the rock's open space volume to its total volume range from 0.04 to more than 0.25 (Ackerman, 1995, p.1, and Lindholm, 1996, p.16).

The majority of aquifer recharge results from surface water irrigation activities (incidental recharge), which divert water from the Snake River and its tributaries (Ackerman, 1995, p. 4, and Garabedian, 1992, p. 11) and locally from canal leakage. Natural recharge occurs through stream losses, direct precipitation, and tributary basin underflow.

Aquifer discharge occurs primarily as seeps and springs on the northern wall of the Snake River canyon near Thousand Springs and near American Falls and Blackfoot (Garabedian, 1992, p.17). To a lesser degree, discharge also occurs through pumping and underflow.

The East Margin Area is among the most transmissive regions of the regional aquifer, therefore it has a higher ability to transmit water. A transmissivity of $21 \text{ ft}^2/\text{sec}$ was used to represent the upper 200 feet of the regional aquifer in the East Margin Area in the three-dimensional USGS ground water flow model (Garabedian, 1992, Plate 6). The equivalent hydraulic conductivity or the rate at which water can move through permeable material is 9,072 feet per day (ft/day). This value is consistent with the range of hydraulic conductivity (9,500 to 11,708 ft/day) calculated using data from a constant-rate aquifer test conducted in 1981 (Jacobson, 1982, p. 23). This range was calculated by dividing the estimated transmissivity (228,000 to 281,000 ft^2/day) by the perforated interval of the observation well (24 feet). The geometric mean hydraulic conductivity based on analysis of specific capacity data from PWS wells (135 ft/day) is significantly lower.

A published water table map of the Upper Snake River Basin (IDWR, 1997, p. 9) indicates that the ground water flow direction in the ESRP aquifer in the East Margin Area is similar to that depicted at the regional scale (e.g., Garabedian, 1992, Plate 4).

Recharge from precipitation and surface water irrigation in the East Margin Area ranges from less than 10 to more than 20 inches per year (Garabedian, 1992, Plate 8). The low end of the range applies to the area near Blackfoot, while the high end applies to the area on the west side of American Falls Reservoir near Aberdeen.

Kjelstrom (1995, p. 13) reports an annual river loss of 280,000 acre-feet to the regional basalt aquifer for the 27.5-mile Lewisville-to-Shelley reach of the Snake River and 110,000 acre-feet for the 23.5-mile Shelley-to-Blackfoot reach. Annual river gains of 1,900,000 acre-feet for the 36.6-mile Blackfoot-to-Neeley reach are also estimated (Kjelstrom, 1995, p. 13). A seepage study conducted in the fall of 1980 on the Portneuf River showed a gain of about 560 cubic feet per second (ft^3/sec) (405,691 acre-feet) for the 13-mile Pocatello-to-American Falls Reservoir reach (Jacobson, 1982, p. 16). The average flow in the Blackfoot River near the city of Blackfoot is low at Station #13068500 ($5.2 \text{ ft}^3/\text{sec}$; USGS, 2001) compared to the flow in the Snake River near the city of Blackfoot at Station #13069500 ($2,900 \text{ ft}^3/\text{sec}$; USGS, 2001).

The delineated source water assessment area for the City of Blackfoot wells trend in a northeast direction and are elongated and conical in shape and extend into the City of Idaho Falls. The actual data used by WGI in determining the source water assessment delineation areas are available from DEQ upon request.

Identifying Potential Sources of Contamination

A potential source of contamination is defined as any facility or activity that stores, uses, or produces, as a product or by-product, the contaminants regulated under the Safe Drinking Water Act and has a sufficient likelihood of releasing such contaminants at levels that could pose a concern relative to drinking water sources. The goal of the inventory process is to locate and describe those facilities, land uses, and environmental conditions that are potential sources of ground water contamination. Field surveys conducted by DEQ and reviews of available databases identified potential contaminant sources within the delineation areas. Some of these include roadways, a railroad, leaking underground storage tank (LUST) sites, underground storage tank (UST) sites, above ground tank (AST) sites, dairies, former gas stations, auto repair shops, general contractors, businesses and industries that use chemicals, deep injection wells, recharge wells, sand and gravel pits, and landfills. Additionally there are sites regulated under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), the Resource Conservation Recovery Act (RCRA), the Superfund Amendments and Reauthorization Act (SARA), the National Pollutant Discharge Elimination System (NPDES), and the Toxic Release Inventory (TRI.).

It is important to understand that a release may never occur from a potential source of contamination provided best management practices are used by the facility. Many potential sources of contamination are regulated at the federal level, state level, or both to reduce the risk of release. Therefore, when a business, facility, or property is identified as a potential contaminant source, this should not be interpreted to mean that this business, facility, or property is in violation of any local, state, or federal environmental law or regulation. What it does mean is that the potential for contamination exists due to the nature of the business, industry, or operation. There are a number of methods that water systems can use to work cooperatively with potential sources of contamination, such as educational visits and inspections of stored materials. Many owners of such facilities may not even be aware that they are located near a public water supply source.

Contaminant Source Inventory Process

A two-phased contaminant inventory of the City of Blackfoot public water system was conducted in October of 2002. The first phase involved identifying and documenting potential contaminant sources within the City of Blackfoot source water assessment areas through the use of computer databases and Geographic Information System (GIS) maps developed by DEQ. Then DEQ conducted the second phase, or enhanced inventory, to validate the sources identified in phase one and to identify additional potential sources of contamination in the delineated source water assessment area. This task was undertaken with the assistance of Mr. Richard Magnum. At the time of the enhanced inventory additional potential contaminant sources were found within the delineated source water area. Maps with well locations, delineated areas and potential contaminant sources are provided with this report (Attachment B). Each potential contaminant source has been given a unique number that references tabular information associated with each public water well (Attachment A.).

Section 3. Susceptibility Analyses

The susceptibility of the wells to contamination was ranked as high, moderate, or low risk according to the following considerations: hydrologic characteristics, physical integrity of the wells, land use characteristics, and potentially significant contaminant sources. The susceptibility rankings are specific to a particular potential contaminant or category of contaminants. Therefore, a high susceptibility rating relative to one potential contaminant does not mean that the water system is at the same risk for all other potential contaminants. The relative ranking that is derived for each well is a qualitative, screening-level step that, in many cases, uses generalized assumptions and best professional judgement. Attachment C contains the susceptibility analysis worksheets. The following summaries describe the rationale for the susceptibility rankings.

Hydrologic Sensitivity

The hydrologic sensitivity of a well is dependent upon four factors. These factors are surface soil composition, the material in the vadose zone (between the land surface and the water table), the depth to first ground water, and the presence of a 50-foot thick fine-grained zone above the producing zone of the well. Slowly draining soils such as silt and clay typically are more protective of ground water than coarse-grained soils such as sand and gravel. Similarly, fine-grained sediments in the subsurface and a water depth of more than 300 feet protect the ground water from contamination.

The hydrologic sensitivity rated high for five wells (see Table 2) and moderate for three wells (see Table 2). All wells reside in soils that have moderate to well draining capabilities as defined by the National Resource Conservation Service (NRCS). Well logs were available for all the wells. However, due to the age of some of the wells, the information provided in the well logs was insufficient to evaluate the hydrologic sensitivity of the wells. For all wells, the depth to first ground water was less than 300 feet below land surface. In most cases the vadose zone was comprised of either fractured rock or gravel and sand material. The wells (except Well #5, Well #8, and Well #10) did not have the presence of at least 50 feet cumulative thickness of low permeability material (clay) that could reduce the downward movement of contaminants.

Well Construction

Well construction directly affects the ability of the wells to protect the aquifer from contaminants. System construction scores are reduced when information shows that potential contaminants will have a more difficult time reaching the intake of the wells. Lower scores imply a system that can better protect the water. If the casing and annular seal both extend into a low permeability unit then the possibility of cross contamination from other aquifer layers is reduced and the system construction score goes down. If the highest production interval is greater than 100 feet below the water table, then the system is considered to have better buffering capacity. When information was adequate, a determination was made as to whether the casing and annular seals extend into low permeability units and whether current public water system (PWS) construction standards are met.

The system construction scores rated moderate for the wells (Table 2). During the enhanced inventory, it was found that all the wellheads were vented and screened and the surface seals were maintained. In the case of Well #8, there was a pipe leading to the well column that was not sealed properly. The open conduit to the well column could allow contamination to enter the well. Additional information regarding well construction is summarized in Table 1.

The Idaho Department of Water Resources (IDWR) *Well Construction Standards Rules (1993)* require all PWSs to follow DEQ standards. IDAPA 58.01.08.550 requires that PWSs follow the *Recommended Standards for Water Works (1997)* during construction. Under current standards, all PWS wells are required to have a 50-foot buffer around the wellhead and if the well is designed to yield greater than 50 gallons per minute (gpm) a minimum of a 6-hour pump test is required. These standards are used to rate the system construction for the well by evaluating items such as condition of wellhead and surface seal, whether the casing and annular space is within consolidated material or 18 feet below the surface, the thickness of the casing, etc. If all criteria are not met, the public water source does not meet the IDWR Well Construction Standards. In most cases, the casing thickness of the wells was less than the recommended IDWR standards for a PWS as listed in the Recommended Standards for Water Works (1997). A thicker casing for a public water source may prolong the life of the wells. Therefore, the wells received a conservatively moderate rating in terms of system construction susceptibility to contamination.

Table 1. Well Construction Summary Information

Well	Depth (feet)	Casing Diameter (inch)	Casing Thickness (inch)	Casing Depth (feet)	Type of formation casing extends into	Water Table Depth (feet)	Screened Interval (feet)	Surface Seal Depth (feet)	Type of formation surface seal extends into	Year Drilled
3	99	12	NA	83	NA	40	NA	NA	NA	1920
5	623	20 18 16 12	NA	0-75 114-136 0-402 385-515	Lava	48	400-515	75	Lava	1954
6	793	18 16 12	NA	0-50 0-292 227-370	Cinders	35	No	NA	NA	1964
7	650	20 16	0.375 0.405	1-79 1-296	Lava	33	No	20	Gravel	1974
8	823	26 20 16 12	0.250 0.375 0.375 0.250	1-50 1-194 190-360 348-700	Gray rock	33	545-565 579-677	50	Gravel	1983
9	668	20 16 12	0.500 0.375 0.375	1-42 2-128 120-348	Basalt	41	140-145 577-606 638-668	128	Basalt	1999
10	391	16 12	0.375 0.250	130-267 198-288	Lava	44	No	60	Lava	2001
11	315	20	0.375	3-153	Cinders	46	No	50	Gravel	2001

NA = Not Available

Potential Contaminant Sources and Land Use

The potential contaminant sources and land use within the delineated zones of water contribution are assessed to determine each well's susceptibility. When agriculture is the predominant land use in the area, this may increase the likelihood of agricultural wastewater infiltrating the ground water system. Agricultural land is counted as a source of leachable contaminants and points are assigned to this rating based on the percentage of agricultural land. The predominant land use within the delineated capture zones of the City of Blackfoot is irrigated agricultural land.

Due to numerous potential contaminant sources, agricultural land with high county level nitrogen and total agricultural chemical usage, and transportation corridors, all eight wells rated high for IOCs (i.e., nitrate), VOCs (i.e. petroleum products), and SOC (i.e. pesticides) and moderate for microbial contaminants (i.e. bacteria). The delineations also cross a nitrate priority area, a VOC priority area, and an SOC priority area. Refer to Table 2 for summary of susceptibility evaluation, Attachment A for a complete potential contaminant inventory, and Attachment B for well locations, delineated TOT zones, and locations of potential contaminants sources.

Final Susceptibility Ranking

A detection above a drinking water standard MCL, any detection of a VOC or SOC, fecal coliform bacteria detected at the wellhead, or having potential contaminant sources within 50 feet of the well will automatically give a high susceptibility rating to the final well ranking despite the land use of the area because a pathway for contamination already exists. In this case, Well #3 rated high susceptibility because fecal coliform was detected at the wellhead. Also, Well #6 rated high susceptibility because PCE was detected at the wellhead. In addition, Well #7 and Well #9 rated high susceptibility because an AST is located within 50 feet of the wells. Well #9 also rated high because of confirmed detections of coliform bacteria at the wellhead. A railroad is located within 50 feet of Well #8, contributing to the high rating. Hydrologic sensitivity and system construction scores are heavily weighted in the final scores. Having multiple potential contaminant sources in the 0 to 3-year time of travel zone (Zone 1B) and a large percentage of agricultural land contribute greatly to the overall ranking. In terms of total susceptibility, the wells rated high for IOC, VOC, SOC, and microbial contaminants (Table 2). These ratings reflect the system construction, hydrologic sensitivity, potential contaminants inventory and land use within the delineated source water assessment areas for the drinking water wells.

Table 2. Summary of City of Blackfoot Susceptibility Evaluation

Drinking Water Sources	Susceptibility Scores ¹									
	Hydrologic Sensitivity	Potential Contaminant Inventory and Land Use				System Construction	Final Susceptibility Ranking			
		IOC	VOC	SOC	Microbials		IOC	VOC	SOC	Microbials
Well #3	H	H	M	M	M	M	H	H	H	H***
Well #5	M	H	H	H	M	M	H	M	M	M
Well #6	H	H	H	H	M	M	H	H*	H	H
Well #7	H	H	H	H	M	M	H	H**	H**	H
Well #8	M	H	H	H	M	M	H~	H~	H~	H~
Well #9	H	H	H	H	M	M	H	H**	H**	H***
Well #10	M	H	H	H	M	M	M	M	M	M
Well #11	H	H	H	H	M	M	H	H	H	H

¹H = High Susceptibility, M = Moderate Susceptibility, L = Low Susceptibility; IOC = inorganic chemical, VOC = volatile organic chemical, SOC = synthetic organic chemical. H* = Indicates source scored high due to presence of PCE in the finished drinking water. H** = Indicates source scored high due to AST located within 50 feet of well. H*** = Indicates source scored high due to presence of fecal coliform and/or coliform bacteria at the wellhead. H~ = Indicates source scored high due to a railroad within 50 feet of well.

Susceptibility Summary

Despite the high susceptibility ratings the City of Blackfoot, the city continues to provide high quality water to its citizens. Some of the wells were automatically rated high susceptibility due to fecal coliform bacteria at the wellhead, ASTs and railroad located within 50 feet of the wells, and the presence of PCE in the well water.

The county level agriculture-chemical use is considered high in this area due a significant amount of agricultural land. Although there may only be a small portion of agriculture land in the direct vicinity of the wells, it is useful as a tool in determining the overall chemical usage such as pesticides and how they may impact ground water through infiltration and surface water runoff. In addition, there were potential sources of contamination found within the wells delineated time of travel zones (Attachment A).

Section 4. Options for Drinking Water Protection

This assessment should be used as a basis for determining appropriate new protection measures or re-evaluating existing protection efforts. No matter what ranking a source receives, protection is always important. Whether the source is currently located in a “pristine” area or an area with numerous industrial and/or agricultural land uses that require surveillance, the way to ensure good water quality in the future is to act now to protect valuable water supply resources. If the system should need to expand in the future, new well sites should be located in areas with as few potential sources of contamination as possible, and the site should be reserved and protected for this specific use.

An effective drinking water protection program is tailored to the particular local drinking water protection area. A community with a fully developed drinking water protection program will incorporate many strategies. For the City of Blackfoot drinking water protection activities should continue efforts in keeping the water system free of contaminants that may affect the drinking water. If microbial problems arise and/or continue, the system may want to consider the addition of a disinfection system. If concentrations of PCE tested approach or exceed the MCL level, the system should take appropriate measures to treat the water source.

In addition, drinking water protection activities should focus on correcting any deficiencies outlined in the sanitary survey. The wells should maintain sanitary standards regarding wellhead protection. Also, any new sources that could be considered potential contaminant sources in the wells’ zones of contribution should also be investigated and monitored to prevent future contamination. No potential contaminants (pesticides, paint, fuel, cleaning supplies, etc.) should be stored or applied within 50 feet of the wells. Land uses within most of the source water assessment area are outside the direct jurisdiction of the City of Blackfoot. Therefore, partnerships with state and local agencies, and industrial and commercial groups should be established to ensure future land uses are protective of ground water quality. Educating employees and the public about source water will further assist the system in its monitoring and protection efforts.

Due to the time involved with the movement of ground water, source water protection activities should be aimed at long-term management strategies even though these strategies may not yield results in the near term. A strong public education program should be a primary focus of any drinking water protection plan. Public education topics could include household hazardous waste disposal methods, proper lawn and garden care, and the importance of water conservation to name but a few. There are multiple resources available to help water systems implement protection programs, including the Drinking Water Academy of the EPA. Drinking water protection activities for agriculture should be coordinated with the Idaho State Department of Agriculture and the Bingham County Soil and Water Conservation District. As major transportation corridors intersect the delineation (such as Highway 20, Highway 26, and Interstate 15), the Idaho Department of Transportation should be involved in protection efforts.

A system must incorporate a variety of strategies in order to develop a comprehensive drinking water protection plan, be they regulatory in nature (i.e. zoning, permitting) or non-regulatory in nature (i.e. good housekeeping, public education, specific best management practices). For assistance in developing protection strategies please contact the Pocatello Regional Office of the DEQ or the Idaho Rural Water Association.

Assistance

Public water supplies and others may call the following DEQ offices with questions about this assessment and to request assistance with developing and implementing a local protection plan. In addition, draft protection plans may be submitted to the DEQ office for preliminary review and comments.

Pocatello Regional DEQ Office (208) 236-6160

State DEQ Office (208) 373-0502

Website: <http://www.deq.state.id.us>

Water suppliers serving fewer than 10,000 persons may contact Ms. Melinda Harper at (208) 343-7001 or email her at mlharper@idahoruralwater.com for assistance with drinking water protection (formerly wellhead protection) strategies.

POTENTIAL CONTAMINANT INVENTORY LIST OF ACRONYMS AND DEFINITIONS

AST (Aboveground Storage Tanks) – Sites with aboveground storage tanks.

Business Mailing List – This list contains potential contaminant sites identified through a yellow pages database search of standard industry codes (SIC).

CERCLIS – This includes sites considered for listing under the **Comprehensive Environmental Response Compensation and Liability Act (CERCLA)**. CERCLA, more commonly known as “Superfund” is designed to clean up hazardous waste sites that are on the national priority list (NPL).

Cyanide Site – DEQ permitted and known historical sites/facilities using cyanide.

Dairy – Sites included in the primary contaminant source inventory represent those facilities regulated by Idaho State Department of Agriculture (ISDA) and may range from a few head to several thousand head of milking cows.

Deep Injection Well – Injection wells regulated under the Idaho Department of Water Resources generally for the disposal of stormwater runoff or agricultural field drainage.

Enhanced Inventory – Enhanced inventory locations are potential contaminant source sites added by the water system. These can include new sites not captured during the primary contaminant inventory, or corrected locations for sites not properly located during the primary contaminant inventory. Enhanced inventory sites can also include miscellaneous sites added by the Idaho Department of Environmental Quality (DEQ) during the primary contaminant inventory.

Floodplain – This is a coverage of the 100year floodplains.

Group 1 Sites – These are sites that show elevated levels of contaminants and are not within the priority one areas.

Inorganic Priority Area – Priority one areas where greater than 25% of the wells/springs show constituents higher than primary standards or other health standards.

Landfill – Areas of open and closed municipal and non-municipal landfills.

LUST (Leaking Underground Storage Tank) – Potential contaminant source sites associated with leaking underground storage tanks as regulated under RCRA.

Mines and Quarries – Mines and quarries permitted through the Idaho Department of Lands.)

Nitrate Priority Area – Area where greater than 25% of wells/springs show nitrate values above 5 mg/l.

NPDES (National Pollutant Discharge Elimination System) – Sites with NPDES permits. The Clean Water Act requires that any discharge of a pollutant to waters of the United States from a point source must be authorized by an NPDES permit.

Organic Priority Areas – These are any areas where greater than 25% of wells/springs show levels greater than 1% of the primary standard or other health standards.

Recharge Point – This includes active, proposed, and possible recharge sites on the Snake River Plain.

RCRA – Site regulated under **Resource Conservation Recovery Act (RCRA)**. RCRA is commonly associated with the cradle to grave management approach for generation, storage, and disposal of hazardous wastes.

SARA Tier II (Superfund Amendments and Reauthorization Act Tier II Facilities) – These sites store certain types and amounts of hazardous materials and must be identified under the Community Right to Know Act.

Toxic Release Inventory (TRI) – The toxic release inventory list was developed as part of the Emergency Planning and Community Right to Know (Community Right to Know) Act passed in 1986. The Community Right to Know Act requires the reporting of any release of a chemical found on the TRI list.

UST (Underground Storage Tank) – Potential contaminant source sites associated with underground storage tanks regulated as regulated under RCRA.

Wastewater Land Applications Sites – These are areas where the land application of municipal or industrial wastewater is permitted by DEQ.

Wellheads – These are drinking water well locations regulated under the Safe Drinking Water Act. They are not treated as potential contaminant sources.

NOTE: Many of the potential contaminant sources were located using a geocoding program where mailing addresses are used to locate a facility.

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Attachment A

City of Blackfoot Potential Contaminant Source Inventory

Table 3. Potential Contaminant Inventory for Well #3

Site	Source Description ¹	TOT Zone (in years) ²	Source Information	Potential Contaminants ³
	Surface Water	0-3	GIS Map	IOC, VOC, SOC, Microbials
1	LUST Site-Cleanup Incomplete; Impact Unknown	0-3	Database Search	VOC, SOC
3	UST Site-State Government; Open	0-3	Database Search	VOC, SOC
4	UST Site-Farm; Closed	0-3	Database Search	VOC, SOC
5	UST Site-State Government; Closed	0-3	Database Search	VOC, SOC
6	Dairy	0-3	Database Search	IOC, Microbials
7	Dairy	0-3	Database Search	IOC, Microbials
8	Dairy	0-3	Database Search	IOC, Microbials
9	Plumbing Drain & Sewer Cleaning	0-3	Database Search	IOC, VOC, Microbials
10	Livestock Buyers	0-3	Database Search	IOC, Microbials
11	Funeral Directors	0-3	Database Search	VOC
12	House & Building Movers	0-3	Database Search	VOC, SOC
14	Remodeling/Repairing Building Contractors	0-3	Database Search	IOC, VOC, SOC
15	SARA Site	0-3	Database Search	IOC
17	Group 1 Site	0-3	Database Search	

¹ SARA = Superfund Amendments and Reauthorization Act, UST = underground storage tank,

LUST = leaking underground storage tank,

² TOT = time-of-travel (in years) for a potential contaminant to reach the wellhead,

³ IOC = inorganic chemical, VOC = volatile organic chemical, SOC = synthetic organic chemical

Table 4. Potential Contaminant Inventory for Well #5

Site	Source Description ¹	TOT Zone (in years) ²	Source Information	Potential Contaminants ³
	Surface Water	0-3	GIS Map	IOC, VOC, SOC, Microbials
1	LUST Site-Cleanup Completed; Impact Unknown	0-3	Database Search	VOC, SOC
2	UST Site-State Government; Closed	0-3	Database Search	VOC, SOC
3	UST Site-Farm; Closed	0-3	Database Search	VOC, SOC
4	UST Site-Commercial; Closed	0-3	Database Search	VOC, SOC
6	Dairy	0-3	Database Search	IOC, Microbials
7	Dairy	0-3	Database Search	IOC, Microbials
8	Dairy	0-3	Database Search	IOC, Microbials
9	Dairy	0-3	Database Search	IOC, Microbials
10	Veterinarians	0-3	Database Search	IOC, VOC, Microbials
11	State Government-National Security	0-3	Database Search	VOC, SOC
12	Livestock Buyers	0-3	Database Search	IOC, Microbials
13	Veterinarians	0-3	Database Search	IOC, VOC, Microbials
15	General Contractors	0-3	Database Search	IOC, VOC, SOC
17	Automobile Repairing & Service	0-3	Database Search	IOC, VOC, SOC
19	Roofing Contractors	0-3	Database Search	IOC, VOC, SOC
21	UST Site-Not Listed; Closed	3-6	Database Search	VOC, SOC
22	Woodworkers	3-6	Database Search	IOC, VOC, SOC
23	Mine/Quarry	3-6	Database Search	IOC, VOC, SOC
24	Landfill	3-6	Database Search	IOC, VOC, SOC
25	Landfill	3-6	Database Search	IOC, VOC, SOC

¹ UST = underground storage tank, LUST = leaking underground storage tank,

² TOT = time-of-travel (in years) for a potential contaminant to reach the wellhead,

³ IOC = inorganic chemical, VOC = volatile organic chemical, SOC = synthetic organic chemical.

Table 5. Potential Contaminant Inventory For Well #6

Site	Source Description¹	TOT Zone (in years)²	Source Information	Potential Contaminants³
	Interstate 15	0-3	GIS Map	IOC, VOC, SOC, Microbials
	Highway 26	0-3	GIS Map	IOC, VOC, SOC, Microbials
	Railroad	0-3	GIS Map	IOC, VOC, SOC, Microbials
	Surface Water	0-3	GIS Map	IOC, VOC, SOC, Microbials
3	UST Site-Gas Station; Closed	0-3	Database Search	VOC, SOC
4	UST Site-Commercial; Closed	0-3	Database Search	VOC, SOC
6	UST Site-Gas Station; Closed	0-3	Database Search	VOC, SOC
8	UST Site-Not Listed; Open	0-3	Database Search	VOC, SOC
9	UST Site-Local Government; Open	0-3	Database Search	VOC, SOC
12	Movers	0-3	Database Search	VOC, SOC
13	Motorcycles & Motor Scooters-Dealers	0-3	Database Search	VOC, SOC
14	Home Builders	0-3	Database Search	IOC, VOC, SOC
15	Storage-Household & Commercial	0-3	Database Search	IOC, VOC, SOC
16	Automobile Repairing & Service	0-3	Database Search	IOC, VOC, SOC
17	Painters	0-3	Database Search	VOC
18	Tire-Dealers Retail	0-3	Database Search	VOC, SOC
19	Carpet & Rug Cleaners	0-3	Database Search	VOC
20	Lawn & Garden Equip & Supplies- Retail	0-3	Database Search	IOC, VOC, SOC
22	Automobile Lubrication Service	0-3	Database Search	IOC, VOC, SOC
23	Farm Equipment (Wholesale)	0-3	Database Search	VOC, SOC
24	Electric Motors-Dlrs/Repairing (Wholesale)	0-3	Database Search	IOC, VOC
25	Potato Harvesting/Planting Equipment	0-3	Database Search	VOC, SOC
27	Automobile Lubrication Service	0-3	Database Search	IOC, VOC, SOC
28	RCRA Site	0-3	Database Search	IOC, VOC, SOC
29	RCRA Site	0-3	Database Search	IOC, VOC, SOC, Microbials
31	RCRA Site	0-3	Database Search	IOC, VOC, SOC
32	Mine/Quarry	0-3	Database Search	IOC, VOC, SOC
33	SARA Site	0-3	Database Search	IOC, VOC, SOC
36	SARA Site	0-3	Database Search	IOC, VOC, SOC
37	SARA Site	0-3	Database Search	IOC, VOC, SOC
38	SARA Site	0-3	Database Search	IOC, VOC, SOC, Microbials
1	UST Site-Not Listed; Closed	3-6	Database Search	VOC, SOC
2	UST Site-Gas Station; Closed	3-6	Database Search	VOC, SOC
5	UST Site-Gas Station; Open	3-6	Database Search	VOC, SOC
7	UST Site-Gas Station; Open	3-6	Database Search	VOC, SOC
10	UST Site-Not Listed; Closed	3-6	Database Search	VOC, SOC
21	Tire-Dealers Retail	3-6	Database Search	VOC, SOC
26	Car Washing & Polishing	3-6	Database Search	IOC, VOC, SOC
34	SARA Site	3-6	Database Search	VOC, SOC
35	SARA Site	3-6	Database Search	VOC, SOC
39	LUST Site-Cleanup Completed; Impact Unknown	3-6	Database Search	VOC, SOC
40	LUST Site-Cleanup Completed; Impact Unknown	3-6	Database Search	VOC, SOC
41	LUST Site-Cleanup Completed; Impact:Groundwater	3-6	Database Search	VOC, SOC
42	UST Site-Truck/Transporter; Closed	3-6	Database Search	VOC, SOC
43	UST Site-Gas Station; Open	3-6	Database Search	VOC, SOC
44	UST Site-Gas Station; Closed	3-6	Database Search	VOC, SOC
45	UST Site-Commercial; Closed	3-6	Database Search	VOC, SOC
46	UST Site-Gas Station; Closed	3-6	Database Search	VOC, SOC

Site	Source Description ¹	TOT Zone (in years) ²	Source Information	Potential Contaminants ³
47	UST Site-Gas Station; Open	3-6	Database Search	VOC, SOC
48	UST Site-Gas Station; Open	3-6	Database Search	VOC, SOC
49	UST Site-Not Listed; Closed	3-6	Database Search	VOC, SOC
50	UST Site-Contractor; Open	3-6	Database Search	VOC, SOC
51	UST Site-Industrial; Open	3-6	Database Search	VOC, SOC
52	UST Site-Auto Dealership; Closed	3-6	Database Search	VOC, SOC
53	UST Site-Local Government; Closed	3-6	Database Search	VOC, SOC
54	UST Site-Contractor; Closed	3-6	Database Search	VOC, SOC
55	UST Site-Petroleum Distributor; Closed	3-6	Database Search	VOC, SOC
56	UST Site-Gas Station; Closed	3-6	Database Search	VOC, SOC
57	UST Site-Commercial; Open	3-6	Database Search	VOC, SOC
58	UST Site-Gas Station; Open	3-6	Database Search	VOC, SOC
59	UST Site-Gas Station; Open	3-6	Database Search	VOC, SOC
60	UST Site-Local Government; Closed	3-6	Database Search	VOC, SOC
61	UST Site-Railroad; Closed	3-6	Database Search	VOC, SOC
62	UST Site-Gas Station; Closed	3-6	Database Search	VOC, SOC
63	UST Site-Gas Station; Open	3-6	Database Search	VOC, SOC
64	UST Site-Gas Station; Closed	3-6	Database Search	VOC, SOC
65	UST Site-Commercial; Closed	3-6	Database Search	VOC, SOC
66	UST Site-Gas Station; Closed	3-6	Database Search	VOC, SOC
67	UST Site-Auto Dealership; Closed	3-6	Database Search	VOC, SOC
68	UST Site-Commercial; Open	3-6	Database Search	VOC, SOC
69	Automobile Dealers-New Cars	3-6	Database Search	VOC, SOC
70	Automobile Repairing & Service	3-6	Database Search	IOC, VOC, SOC
71	Potato Harvesting/Planting Equipment	3-6	Database Search	VOC, SOC
72	General Contractors	3-6	Database Search	IOC, VOC, SOC
73	Automobile Parts & Supplies-Retail	3-6	Database Search	VOC, SOC
74	Automobile Repairing & Service	3-6	Database Search	IOC, VOC, SOC
75	Hospitals	3-6	Database Search	IOC, SOC
76	Laboratories-Testing	3-6	Database Search	IOC, VOC, SOC
77	Veterinarians	3-6	Database Search	IOC, VOC
78	Service Stations-Gasoline & Oil	3-6	Database Search	VOC, SOC
79	Fire Departments	3-6	Database Search	VOC, SOC
80	Motorcycles & Motor Scooters-Dealers	3-6	Database Search	VOC, SOC
81	Automobile Dealers-New Cars	3-6	Database Search	VOC, SOC
82	Recreational Vehicles-Renting	3-6	Database Search	VOC, SOC
83	Automobile Body-Repairing & Painting	3-6	Database Search	IOC, VOC, SOC
84	Service Stations-Gasoline & Oil	3-6	Database Search	VOC, SOC
85	Automobile Body-Repairing & Painting	3-6	Database Search	IOC, VOC, SOC
86	Automobile Dealers-Used Cars	3-6	Database Search	VOC, SOC
87	Automobile Repairing & Service	3-6	Database Search	IOC, VOC, SOC
88	Farming Service	3-6	Database Search	IOC, SOC
89	Electric Equipment & Supplies-Wholesale	3-6	Database Search	IOC, VOC
90	Buildings-Pre-Cut Prefab/Modular	3-6	Database Search	IOC, VOC, SOC
91	General Contractors	3-6	Database Search	IOC, VOC, SOC
92	Dairy Products-Wholesale	3-6	Database Search	IOC
93	Aircraft Charter Rental & Leasing	3-6	Database Search	VOC, SOC
94	Meat Processing	3-6	Database Search	IOC
95	Signs Manufacturers	3-6	Database Search	IOC, VOC, SOC
96	Dried/Dehydrated Fruits Veg (Mfr)	3-6	Database Search	IOC
97	Electric Companies	3-6	Database Search	IOC, VOC
98	Cleaners	3-6	Database Search	VOC
99	Well Drilling	3-6	Database Search	IOC, VOC, SOC

Site	Source Description ¹	TOT Zone (in years) ²	Source Information	Potential Contaminants ³
100	Veterinarians	3-6	Database Search	IOC, VOC
101	Automobile Body-Repairing & Painting	3-6	Database Search	IOC, VOC, SOC
102	Service Stations-Gasoline & Oil	3-6	Database Search	VOC, SOC
103	Mechanical Contractors	3-6	Database Search	IOC, VOC, SOC
104	Automobile Parts & Supplies-Retail	3-6	Database Search	VOC, SOC
105	Auto Machine Shop Service	3-6	Database Search	IOC, VOC, SOC
106	Engines-Gasoline	3-6	Database Search	IOC, VOC, SOC
107	Cut Stone & Stone Products Manufacturers	3-6	Database Search	IOC, VOC, SOC
108	Automobile Parts & Supplies-Mfrs	3-6	Database Search	VOC, SOC
109	Automobile Dealers-Used Cars	3-6	Database Search	VOC, SOC
110	Newspapers (Publishers)	3-6	Database Search	IOC, VOC
111	Printers	3-6	Database Search	VOC
112	Automobile Body-Repairing & Painting	3-6	Database Search	IOC, VOC, SOC
113	Laboratories-Dental	3-6	Database Search	IOC, VOC, SOC
114	Automobile Body-Repairing & Painting	3-6	Database Search	IOC, VOC, SOC
115	Photographers-Portrait	3-6	Database Search	VOC
116	Automobile Body-Repairing & Painting	3-6	Database Search	IOC, VOC, SOC
117	Mufflers & Exhaust Systems-Engine	3-6	Database Search	IOC, VOC, SOC
118	Printers	3-6	Database Search	VOC
119	Trucking-Heavy Hauling	3-6	Database Search	VOC, SOC
120	Fertilizers (Wholesale)	3-6	Database Search	IOC
121	Veterinarians	3-6	Database Search	IOC, VOC
122	Cleaners	3-6	Database Search	VOC
123	Veterinarians	3-6	Database Search	IOC, VOC
124	Cheese Processors	3-6	Database Search	IOC, VOC
125	Plumbing Fixtures & Supplies (Wholesale)	3-6	Database Search	IOC, VOC, SOC
126	Veterinarians	3-6	Database Search	IOC, VOC
127	Tanners (Manufacturers)	3-6	Database Search	VOC, SOC
128	Photographers-Portrait	3-6	Database Search	VOC
129	Truck-Dealers-Used	3-6	Database Search	VOC, SOC
130	Screen Printing	3-6	Database Search	VOC
131	Roofing Contractors	3-6	Database Search	IOC, VOC, SOC
132	Auto Machine Shop Service	3-6	Database Search	IOC, VOC, SOC
133	Recreational Vehicles	3-6	Database Search	VOC, SOC
134	Tractor-Dealers (Wholesale)	3-6	Database Search	VOC, SOC
135	Auto Detail & Clean-Up Service	3-6	Database Search	IOC, VOC, SOC
136	NPDES Site	3-6	Database Search	IOC
137	NPDES Site	3-6	Database Search	IOC
138	Toxic Release Inventory	3-6	Database Search	VOC, SOC
139	Toxic Release Inventory	3-6	Database Search	VOC, SOC
140	CERCLA Site	3-6	Database Search	IOC, VOC, SOC
141	RCRA Site	3-6	Database Search	IOC, VOC, SOC
142	RCRA Site	3-6	Database Search	IOC, VOC, SOC
143	RCRA Site	3-6	Database Search	IOC, VOC, SOC
144	RCRA Site	3-6	Database Search	VOC
145	RCRA Site	3-6	Database Search	IOC, VOC, SOC
146	RCRA Site	3-6	Database Search	IOC
147	RCRA Site	3-6	Database Search	IOC, SOC
148	RCRA Site	3-6	Database Search	VOC
149	RCRA Site	3-6	Database Search	IOC, SOC
150	RCRA Site	3-6	Database Search	IOC, VOC, SOC
151	RCRA Site	3-6	Database Search	IOC, VOC, SOC

Site	Source Description ¹	TOT Zone (in years) ²	Source Information	Potential Contaminants ³
152	SARA Site	3-6	Database Search	IOC, VOC, SOC
153	SARA Site	3-6	Database Search	IOC, VOC, SOC
154	SARA Site	3-6	Database Search	IOC, VOC, SOC
155	SARA Site	3-6	Database Search	IOC
156	SARA Site	3-6	Database Search	VOC, SOC
157	SARA Site	3-6	Database Search	IOC, SOC
158	SARA Site	3-6	Database Search	IOC, VOC, SOC
159	SARA Site	3-6	Database Search	IOC, VOC
160	SARA Site	3-6	Database Search	IOC, VOC, SOC
161	SARA Site	3-6	Database Search	IOC, VOC, SOC
162	SARA Site	3-6	Database Search	VOC, SOC
163	SARA Site	3-6	Database Search	IOC, SOC
164	AST Site	3-6	Database Search	VOC, SOC
165	AST Site	3-6	Database Search	VOC, SOC
166	AST Site	3-6	Database Search	VOC, SOC
167	Group 1 Site	3-6	Database Search	
168	Wastewater Land Application Site	3-6	Database Search	IOC
11	Automobile Dealers-Used Cars	6-10	Database Search	VOC, SOC
169	LUST Site-Cleanup Incomplete; Impact Unknown	6-10	Database Search	VOC, SOC
170	UST Site-Not Listed; Closed	6-10	Database Search	VOC, SOC
171	UST Site-Not Listed; Open	6-10	Database Search	VOC, SOC
172	UST Site-Commercial; Closed	6-10	Database Search	VOC, SOC
173	UST Site-State Government; Open	6-10	Database Search	VOC, SOC
174	UST Site-Not Listed; Open	6-10	Database Search	VOC, SOC
175	UST Site-Other; Open	6-10	Database Search	VOC, SOC
176	UST Site-State Government; Closed	6-10	Database Search	VOC, SOC
177	UST Site-Truck/Transporter; Open	6-10	Database Search	VOC, SOC
178	UST Site-Other; Closed	6-10	Database Search	VOC, SOC
179	UST Site-Gas Station; Open	6-10	Database Search	VOC, SOC
180	UST Site-Gas Station; Open	6-10	Database Search	VOC, SOC
181	Dairy	6-10	Database Search	IOC
182	Hardware-Retail	6-10	Database Search	IOC, VOC, SOC
183	Lawn & Garden Equip & Supplies-Retail	6-10	Database Search	IOC, VOC, SOC
184	Motorcycles & Motor Scooters-Supplies	6-10	Database Search	VOC, SOC
185	County Government-Transportation Program	6-10	Database Search	VOC, SOC
186	General Contractors	6-10	Database Search	IOC, VOC, SOC
187	General Contractors	6-10	Database Search	IOC, VOC, SOC
188	Building Contractors	6-10	Database Search	IOC, VOC, SOC
189	Machine Shops	6-10	Database Search	IOC, VOC, SOC
190	Welding	6-10	Database Search	IOC, VOC
191	Well Drilling	6-10	Database Search	IOC, VOC, SOC
192	General Contractors	6-10	Database Search	IOC, VOC, SOC
193	Funeral Directors	6-10	Database Search	VOC
194	Funeral Directors	6-10	Database Search	VOC
195	Tile-Ceramic-Contractors & Dealers	6-10	Database Search	VOC, SOC
196	Service Stations-Gasoline & Oil	6-10	Database Search	VOC, SOC
197	Mufflers & Exhaust Systems-Engine	6-10	Database Search	IOC, VOC, SOC
198	Ranches	6-10	Database Search	IOC
199	Service Stations-Gasoline & Oil	6-10	Database Search	VOC, SOC
200	Commercial Printing	6-10	Database Search	IOC, VOC

Site	Source Description ¹	TOT Zone (in years) ²	Source Information	Potential Contaminants ³
201	Funeral Directors	6-10	Database Search	VOC
202	Truck-Repairing & Service	6-10	Database Search	IOC, VOC, SOC
203	Oils-Fuel (Wholesale)	6-10	Database Search	VOC, SOC
204	Concrete Contractors	6-10	Database Search	IOC, VOC, SOC
205	Truck Renting & Leasing	6-10	Database Search	VOC, SOC
206	Delivery Service	6-10	Database Search	VOC, SOC
207	Remodeling/Repairing Building Contractors	6-10	Database Search	IOC, VOC, SOC
208	Automobile Dealers-Used Cars	6-10	Database Search	VOC, SOC
209	Oils-Fuel (Wholesale)	6-10	Database Search	VOC, SOC
210	RCRA Site	6-10	Database Search	IOC, VOC, SOC
211	RCRA Site	6-10	Database Search	IOC, VOC, SOC
212	RCRA Site	6-10	Database Search	IOC, VOC, SOC
213	SARA Site	6-10	Database Search	VOC, SOC
214	SARA Site	6-10	Database Search	IOC, VOC, SOC
215	SARA Site	6-10	Database Search	IOC, VOC, SOC
216	SARA Site	6-10	Database Search	VOC, SOC
217	SARA Site	6-10	Database Search	VOC, SOC
218	SARA Site	6-10	Database Search	VOC, SOC
219	AST Site	6-10	Database Search	VOC, SOC
220	AST Site	6-10	Database Search	VOC, SOC
221	Group 1 Site	6-10	Database Search	
222	Wastewater Land Application Site	6-10	Database Search	IOC

¹ SARA = Superfund Amendments and Reauthorization Act, RCRA = Resource Conservation Recovery Act, CERCLA = Comprehensive Environmental Response Compensation and Liability Act, NPDES = National Pollutant Discharge Elimination System, UST = underground storage tank, LUST = leaking underground storage tank, AST = aboveground storage tank

² TOT = time-of-travel (in years) for a potential contaminant to reach the wellhead,

³ IOC = inorganic chemical, VOC = volatile organic chemical, SOC = synthetic organic chemical

Table 6. Potential Contaminant Inventory for Well #7

Site	Source Description ¹	TOT Zone (in years) ²	Source Information	Potential Contaminants ³
	Cemetery	0-3	GIS Map	IOC, SOC, Microbials
	Highway 91	0-3	GIS Map	IOC, VOC, SOC, Microbials
	Railroad	0-3	GIS Map	IOC, VOC, SOC, Microbials
	Surface Water	0-3	GIS Map	IOC, VOC, SOC, Microbials
1	LUST Site-Cleanup Completed; Impact Unknown	0-3	Database Search	VOC, SOC
2	UST Site-Not Listed; Closed	0-3	Database Search	VOC, SOC
3	UST Site-State Government; Closed	0-3	Database Search	VOC, SOC
4	UST Site-Not Listed; Closed	0-3	Database Search	VOC, SOC
5	UST Site-Local Government; Closed	0-3	Database Search	VOC, SOC
6	UST Site-Other; Open	0-3	Database Search	VOC, SOC
7	UST Site-State Government; Closed	0-3	Database Search	VOC, SOC
8	UST Site-Commercial; Closed	0-3	Database Search	VOC, SOC
9	UST Site-State Government; Closed	0-3	Database Search	VOC, SOC
10	UST Site-Commercial; Closed	0-3	Database Search	VOC, SOC
11	UST Site-Gas Station; Open	0-3	Database Search	VOC, SOC
12	Dairy	0-3	Database Search	IOC, Microbials
13	Dairy	0-3	Database Search	IOC, Microbials
14	Dairy	0-3	Database Search	IOC, Microbials
15	Dairy	0-3	Database Search	IOC, Microbials
16	Dairy	0-3	Database Search	IOC, Microbials

Site	Source Description ¹	TOT Zone (in years) ²	Source Information	Potential Contaminants ³
17	Hardware-Retail	0-3	Database Search	IOC, VOC, SOC
18	Veterinarians	0-3	Database Search	IOC, VOC, Microbials
19	State Government-National Security	0-3	Database Search	VOC, SOC
20	County Government-Transportation Program	0-3	Database Search	VOC, SOC
21	Hospitals	0-3	Database Search	IOC, SOC, Microbials
22	Fire Departments	0-3	Database Search	VOC, SOC
23	Livestock Buyers	0-3	Database Search	IOC, Microbials
24	Veterinarians	0-3	Database Search	IOC, VOC, Microbials
26	General Contractors	0-3	Database Search	IOC, VOC, SOC
27	Aircraft Charter Rental & Leasing	0-3	Database Search	VOC, SOC
28	Meat Processing	0-3	Database Search	IOC, Microbials
29	Tile-Ceramic-Contractors & Dealers	0-3	Database Search	VOC, SOC
30	Service Stations-Gasoline & Oil	0-3	Database Search	VOC, SOC
31	Mufflers & Exhaust Systems-Engine	0-3	Database Search	IOC, VOC, SOC
32	Service Stations-Gasoline & Oil	0-3	Database Search	VOC, SOC
33	Commercial Printing	0-3	Database Search	IOC, VOC
34	Newspapers (Publishers)	0-3	Database Search	IOC, VOC
35	Oils-Fuel (Wholesale)	0-3	Database Search	VOC, SOC
36	General Contractors	0-3	Database Search	IOC, VOC, SOC
37	Truck Renting & Leasing	0-3	Database Search	VOC, SOC
38	Automobile Repairing & Service	0-3	Database Search	IOC, VOC, SOC
39	Rental Service-Stores & Yards	0-3	Database Search	VOC, SOC
40	Truck Renting & Leasing	0-3	Database Search	VOC, SOC
41	Roofing Contractors	0-3	Database Search	IOC, VOC, SOC
42	Automobile Dealers-Used Cars	0-3	Database Search	VOC, SOC
43	Oils-Fuel (Wholesale)	0-3	Database Search	VOC, SOC
44	RCRA Site	0-3	Database Search	IOC, VOC, SOC
45	RCRA Site	0-3	Database Search	IOC, VOC, SOC
46	RCRA Site	0-3	Database Search	VOC
47	SARA Site	0-3	Database Search	IOC
48	SARA Site	0-3	Database Search	VOC, SOC
49	SARA Site	0-3	Database Search	VOC, SOC
50	SARA Site	0-3	Database Search	IOC, VOC, SOC
51	SARA Site	0-3	Database Search	VOC, SOC
52	AST Site	0-3	Database Search	VOC, SOC
53	AST Site	0-3	Database Search	VOC, SOC
54	UST Site-Farm; Closed	3-6	Database Search	VOC, SOC
55	UST Site-Utilities; Closed	3-6	Database Search	VOC, SOC
56	Mine/Quarry	3-6	Database Search	IOC, VOC, SOC
57	Deep Injection Well	3-6	Database Search	IOC, VOC, SOC
58	Deep Injection Well	3-6	Database Search	IOC, VOC, SOC
59	SARA Site	3-6	Database Search	IOC, VOC, SOC
60	UST Site-Not Listed; Closed	6-10	Database Search	VOC, SOC
61	UST Site-Farm; Closed	6-10	Database Search	VOC, SOC
62	UST Site-Not Listed; Closed	6-10	Database Search	VOC, SOC
63	UST Site-Farm; Closed	6-10	Database Search	VOC, SOC
64	UST Site-Other; Closed	6-10	Database Search	VOC, SOC
65	Dairy	6-10	Database Search	IOC
66	Dairy	6-10	Database Search	IOC
67	Dairy	6-10	Database Search	IOC
68	Dairy	6-10	Database Search	IOC
69	Trucking-Heavy Hauling	6-10	Database Search	VOC, SOC
70	Truck-Repairing & Service	6-10	Database Search	IOC, VOC, SOC

Site	Source Description ¹	TOT Zone (in years) ²	Source Information	Potential Contaminants ³
71	Trucking-Contract Hauling	6-10	Database Search	VOC, SOC
72	Tire-Retreading/Repair	6-10	Database Search	VOC
73	Tree Service	6-10	Database Search	VOC, SOC
74	Sheet Metal Fabricators	6-10	Database Search	IOC, VOC
75	Woodworkers	6-10	Database Search	IOC, VOC, SOC
76	CERCLA Site	6-10	Database Search	IOC, VOC, SOC
77	Mine/Quarry	6-10	Database Search	IOC, VOC, SOC
78	SARA Site	6-10	Database Search	IOC, VOC, SOC
79	AST Site	6-10	Database Search	VOC, SOC
80	Group 1 Site	6-10	Database Search	
81	Wastewater Land Application Site	6-10	Database Search	IOC
82	Landfill	6-10	Database Search	IOC, VOC, SOC
83	Landfill	6-10	Database Search	IOC, VOC, SOC
84	Setting Pond	6-10	Enhanced Inventory	IOC, VOC, SOC

¹ SARA = Superfund Amendments and Reauthorization Act, RCRA = Resource Conservation Recovery Act, CERCLA = Comprehensive Environmental Response Compensation and Liability Act, UST = underground storage tank, LUST = leaking underground storage tank, AST = aboveground storage tank

² TOT = time-of-travel (in years) for a potential contaminant to reach the wellhead,

³ IOC = inorganic chemical, VOC = volatile organic chemical, SOC = synthetic organic chemical

Table 7. Potential Contaminant Inventory for Well #8

Site	Source Description ¹	TOT Zone (in years) ²	Source Information	Potential Contaminants ³
	Highway 91	0-3	GIS Map	IOC, VOC, SOC, Microbials
	Highway 26	0-3	GIS Map	IOC, VOC, SOC, Microbials
	Railroad	0-3	GIS Map	IOC, VOC, SOC, Microbials
	Surface Water	0-3	GIS Map	IOC, VOC, SOC, Microbials
1	LUST Site-Cleanup Completed; Impact: Ground water	0-3	Database Search	VOC, SOC
2	UST Site-Not Listed; Closed	0-3	Database Search	VOC, SOC
4	UST Site-Gas Station; Closed	0-3	Database Search	VOC, SOC
5	UST Site-Gas Station; Open	0-3	Database Search	VOC, SOC
6	UST Site-Gas Station; Open	0-3	Database Search	VOC, SOC
7	UST Site-Gas Station; Closed	0-3	Database Search	VOC, SOC
8	UST Site-Gas Station; Open	0-3	Database Search	VOC, SOC
9	UST Site-Gas Station; Open	0-3	Database Search	VOC, SOC
10	UST Site-Gas Station; Closed	0-3	Database Search	VOC, SOC
11	UST Site-Not Listed; Open	0-3	Database Search	VOC, SOC
12	UST Site-Gas Station; Open	0-3	Database Search	VOC, SOC
14	UST Site-Auto Dealership; Closed	0-3	Database Search	VOC, SOC
15	UST Site-Not Listed; Closed	0-3	Database Search	VOC, SOC
16	Dairy	0-3	Database Search	IOC, Microbials
17	Dairy	0-3	Database Search	IOC, Microbials
18	Dairy	0-3	Database Search	IOC, Microbials
19	Dairy	0-3	Database Search	IOC, Microbials
20	Automobile Dealers-New Cars	0-3	Database Search	VOC, SOC
21	Automobile Repairing & Service	0-3	Database Search	IOC, VOC, SOC
22	General Contractors	0-3	Database Search	IOC, VOC, SOC
24	County Government-Transportation Program	0-3	Database Search	VOC, SOC
25	Service Stations-Gasoline & Oil	0-3	Database Search	VOC, SOC
26	Livestock Buyers	0-3	Database Search	IOC, Microbials
27	Movers	0-3	Database Search	VOC, SOC
28	Building Contractors	0-3	Database Search	IOC, VOC, SOC

Site	Source Description ¹	TOT Zone (in years) ²	Source Information	Potential Contaminants ³
30	Motorcycles & Motor Scooters-Dealers	0-3	Database Search	VOC, SOC
31	General Contractors	0-3	Database Search	IOC, VOC, SOC
33	Building Contractors	0-3	Database Search	IOC, VOC, SOC
34	Automobile Repairing & Service	0-3	Database Search	IOC, VOC, SOC
35	Welding	0-3	Database Search	IOC, VOC
36	Painters	0-3	Database Search	VOC
38	Landscape Contractors	0-3	Database Search	IOC, VOC, SOC
39	Tire-Dealers Retail	0-3	Database Search	VOC, SOC
41	Engines-Gasoline	0-3	Database Search	IOC, VOC, SOC
42	Ranches	0-3	Database Search	IOC, Microbials
43	Automobile Parts & Supplies-Mfrs	0-3	Database Search	VOC, SOC
44	Lawn & Garden Equip & Supplies-Retail	0-3	Database Search	IOC, VOC, SOC
45	Tire-Dealers Retail	0-3	Database Search	VOC, SOC
46	Laboratories-Dental	0-3	Database Search	IOC, VOC, SOC, Microbials
49	Automobile Lubrication Service	0-3	Database Search	IOC, VOC, SOC
51	Farm Equipment (Wholesale)	0-3	Database Search	VOC, SOC
52	Truck Renting & Leasing	0-3	Database Search	VOC, SOC
53	Electric Motors-Dlrs/Repairing (Wholesale)	0-3	Database Search	IOC, VOC
54	Car Washing & Polishing	0-3	Database Search	IOC, VOC, SOC, Microbials
55	Automobile Lubrication Service	0-3	Database Search	IOC, VOC, SOC
56	Automobile Repairing & Service	0-3	Database Search	IOC, VOC, SOC
57	Rental Service-Stores & Yards	0-3	Database Search	VOC, SOC
59	RCRA Site	0-3	Database Search	IOC, VOC, SOC
60	RCRA Site	0-3	Database Search	IOC, VOC, SOC
61	RCRA Site	0-3	Database Search	IOC, VOC, SOC
62	RCRA Site	0-3	Database Search	IOC, VOC, SOC, Microbials
63	RCRA Site	0-3	Database Search	IOC, VOC, SOC
64	RCRA Site	0-3	Database Search	IOC, VOC, SOC
66	SARA Site	0-3	Database Search	VOC, SOC
67	SARA Site	0-3	Database Search	VOC, SOC
68	SARA Site	0-3	Database Search	VOC, SOC
69	SARA Site	0-3	Database Search	VOC, SOC
70	SARA Site	0-3	Database Search	IOC, SOC
71	Recharge Point	0-3	Database Search	IOC, VOC, SOC, Microbials
72	AST Site	0-3	Database Search	VOC, SOC
73	Group 1 Site	0-3	Database Search	
74	UST Site-Farm; Closed	3-6	Database Search	VOC, SOC
75	UST Site-Utilities; Closed	3-6	Database Search	VOC, SOC
76	Dairy	3-6	Database Search	IOC
77	Mine/Quarry	3-6	Database Search	IOC, VOC, SOC
78	Mine/Quarry	3-6	Database Search	IOC, VOC, SOC
79	Mine/Quarry	3-6	Database Search	IOC, VOC, SOC
80	Deep Injection Well	3-6	Database Search	IOC, VOC, SOC
81	Deep Injection Well	3-6	Database Search	IOC, VOC, SOC
82	SARA Site	3-6	Database Search	IOC, VOC, SOC
83	LUST Site-Cleanup Incomplete; Impact Unknown	6-10	Database Search	VOC, SOC
84	LUST Site-Cleanup Incomplete; Impact Unknown	6-10	Database Search	VOC, SOC
85	LUST Site-Cleanup Completed; Impact Unknown	6-10	Database Search	VOC, SOC
86	UST Site-Not Listed; Closed	6-10	Database Search	VOC, SOC

Site	Source Description ¹	TOT Zone (in years) ²	Source Information	Potential Contaminants ³
87	UST Site-Gas Station; Closed	6-10	Database Search	VOC, SOC
88	UST Site-Farm; Closed	6-10	Database Search	VOC, SOC
89	UST Site-Not Listed; Closed	6-10	Database Search	VOC, SOC
90	UST Site-Commercial; Closed	6-10	Database Search	VOC, SOC
91	UST Site-Local Government; Closed	6-10	Database Search	VOC, SOC
92	UST Site-Utilities; Closed	6-10	Database Search	VOC, SOC
93	UST Site-Industrial; Closed	6-10	Database Search	VOC, SOC
94	UST Site-Farm; Closed	6-10	Database Search	VOC, SOC
95	UST Site-Other; Closed	6-10	Database Search	VOC, SOC
96	UST Site-Not Listed; Closed	6-10	Database Search	VOC, SOC
97	UST Site-Other; Closed	6-10	Database Search	VOC, SOC
98	UST Site-Gas Station; Open	6-10	Database Search	VOC, SOC
99	UST Site-Contractor; Open	6-10	Database Search	VOC, SOC
100	UST Site-Other; Closed	6-10	Database Search	VOC, SOC
101	UST Site-Truck/Transporter; Open	6-10	Database Search	VOC, SOC
102	Dairy	6-10	Database Search	IOC
103	Dairy	6-10	Database Search	IOC
104	Dairy	6-10	Database Search	IOC
105	Dairy	6-10	Database Search	IOC
106	Logging	6-10	Database Search	VOC, SOC
107	Well Drilling	6-10	Database Search	IOC, VOC, SOC
108	Mechanical Contractors	6-10	Database Search	IOC, VOC, SOC
109	Roofing Contractors	6-10	Database Search	IOC, VOC, SOC
110	Trucking-Heavy Hauling	6-10	Database Search	VOC, SOC
111	Septic Tanks-Cleaning & Repair	6-10	Database Search	IOC, VOC
112	Nurserymen	6-10	Database Search	IOC, SOC
113	Truck-Repairing & Service	6-10	Database Search	IOC, VOC, SOC
114	Powder Coatings Manufacturers	6-10	Database Search	IOC, VOC, SOC
115	Automobile Repairing & Service	6-10	Database Search	IOC, VOC, SOC
116	Trucking-Contract Hauling	6-10	Database Search	VOC, SOC
117	Tire-Retreading/Repair	6-10	Database Search	VOC
118	Grading Contractors	6-10	Database Search	VOC
119	Home Improvements	6-10	Database Search	IOC, VOC, SOC
120	Garbage Collection	6-10	Database Search	IOC, VOC, SOC
121	Welding	6-10	Database Search	IOC, VOC
122	Tree Service	6-10	Database Search	VOC, SOC
123	Sheet Metal Fabricators	6-10	Database Search	IOC, VOC
124	Printers	6-10	Database Search	VOC
125	Funeral Directors	6-10	Database Search	VOC
126	Printers	6-10	Database Search	VOC
127	Woodworkers	6-10	Database Search	IOC, VOC, SOC
128	City Government-Transportation Program	6-10	Database Search	VOC, SOC
129	Newspapers (Publishers)	6-10	Database Search	IOC, VOC
130	Trailer-Manufacturers	6-10	Database Search	IOC, VOC, SOC
131	Truck Renting & Leasing	6-10	Database Search	VOC, SOC
132	Electric Companies	6-10	Database Search	IOC, VOC
133	Toxic Release Inventory	6-10	Database Search	VOC, SOC
134	Toxic Release Inventory	6-10	Database Search	VOC, SOC
135	CERCLA Site	6-10	Database Search	IOC, VOC, SOC
136	CERCLA Site	6-10	Database Search	IOC, VOC, SOC
137	RCRA Site	6-10	Database Search	IOC, VOC, SOC
138	RCRA Site	6-10	Database Search	IOC, VOC, SOC
139	RCRA Site	6-10	Database Search	VOC, SOC

Site	Source Description ¹	TOT Zone (in years) ²	Source Information	Potential Contaminants ³
140	RCRA Site	6-10	Database Search	IOC, VOC, SOC
141	Mine/Quarry	6-10	Database Search	IOC, VOC, SOC
142	Mine/Quarry	6-10	Database Search	IOC, VOC, SOC
143	Mine/Quarry	6-10	Database Search	IOC, VOC, SOC
144	Deep Injection Well	6-10	Database Search	IOC, VOC, SOC
145	Deep Injection Well	6-10	Database Search	IOC, VOC, SOC
146	SARA Site	6-10	Database Search	VOC, SOC
147	SARA Site	6-10	Database Search	IOC, VOC, SOC
148	SARA Site	6-10	Database Search	IOC, VOC, SOC
149	SARA Site	6-10	Database Search	IOC, VOC, SOC
150	SARA Site	6-10	Database Search	IOC, VOC, SOC
151	SARA Site	6-10	Database Search	VOC, SOC
152	SARA Site	6-10	Database Search	IOC, VOC, SOC
153	SARA Site	6-10	Database Search	IOC, VOC, SOC
154	SARA Site	6-10	Database Search	IOC, VOC, SOC
155	AST Site	6-10	Database Search	VOC, SOC
156	AST Site	6-10	Database Search	VOC, SOC
157	Group 1 Site	6-10	Database Search	
158	Group 1 Site	6-10	Database Search	
159	Group 1 Site	6-10	Database Search	
160	Wastewater Land Application Site	6-10	Database Search	IOC
161	Landfill	6-10	Database Search	IOC, VOC, SOC
162	Landfill	6-10	Database Search	IOC, VOC, SOC
163	Settling Ponds	6-10	Enhanced Inventory	IOC, VOC, SOC
164	Gravel Pit	6-10	Enhanced Inventory	IOC, VOC, SOC
165	Auto Repair	6-10	Enhanced Inventory	IOC, VOC, SOC
166	AST	6-10	Enhanced Inventory	VOC, SOC
167	Gas Station	6-10	Enhanced Inventory	VOC, SOC

¹ SARA = Superfund Amendments and Reauthorization Act, RCRA = Resource Conservation Recovery Act, CERCLA = Comprehensive Environmental Response Compensation and Liability Act, UST = underground storage tank, LUST = leaking underground storage tank, AST = aboveground storage tank

² TOT = time-of-travel (in years) for a potential contaminant to reach the wellhead,

³ IOC = inorganic chemical, VOC = volatile organic chemical, SOC = synthetic organic chemical

Table 8. Potential Contaminant Inventory for Well #9

Site	Source Description ¹	TOT Zone (in years) ²	Source Information	Potential Contaminants ³
	Surface Water	0-3	GIS Map	IOC, VOC, SOC, Microbials
	Highway 91	0-3	GIS Map	IOC, VOC, SOC, Microbials
1	UST Site-Farm; Closed	0-3	Database Search	VOC, SOC
2	UST Site-Other; Closed	0-3	Database Search	VOC, SOC
3	Dairy	0-3	Database Search	IOC, Microbials
4	Dairy	0-3	Database Search	IOC, Microbials
5	Dairy	0-3	Database Search	IOC, Microbials
6	Dairy	0-3	Database Search	IOC, Microbials
7	Dairy	0-3	Database Search	IOC, Microbials
8	Dairy	0-3	Database Search	IOC, Microbials
9	Building Contractors	0-3	Database Search	IOC, VOC, SOC
10	Lawn Maintenance	0-3	Database Search	IOC, SOC
11	Fertilizers (Wholesale)	0-3	Database Search	IOC
12	Welding	0-3	Database Search	IOC, VOC
13	Mine/Quarry	0-3	Database Search	IOC, VOC, SOC
14	Mine/Quarry	0-3	Database Search	IOC, VOC, SOC

Site	Source Description ¹	TOT Zone (in years) ²	Source Information	Potential Contaminants ³
15	Recharge Point	0-3	Database Search	IOC, VOC, SOC, Microbials
16	Recharge Point	0-3	Database Search	IOC, VOC, SOC, Microbials
17	Group 1 Site	0-3	Database Search	
18	UST Site-Not Listed; Closed	3-6	Database Search	VOC, SOC
19	UST Site-Farm; Closed	3-6	Database Search	VOC, SOC
20	UST Site-Utilities; Closed	3-6	Database Search	VOC, SOC
21	UST Site-Farm; Closed	3-6	Database Search	VOC, SOC
22	Dairy	3-6	Database Search	IOC
23	Dairy	3-6	Database Search	IOC
24	Dairy	3-6	Database Search	IOC
25	Dairy	3-6	Database Search	IOC
26	Pumps-Manufacturers	3-6	Database Search	IOC, VOC, SOC
27	Trucking-Contract Hauling	3-6	Database Search	VOC, SOC
28	Tire-Retreading/Repair	3-6	Database Search	VOC
29	Woodworkers	3-6	Database Search	IOC, VOC, SOC
30	Mine/Quarry	3-6	Database Search	IOC, VOC, SOC
31	Deep Injection Well	3-6	Database Search	IOC, VOC, SOC
32	Deep Injection Well	3-6	Database Search	IOC, VOC, SOC
33	SARA Site	3-6	Database Search	IOC, VOC, SOC
34	Group 1 Site	3-6	Database Search	
35	Wastewater Land Application Site	3-6	Database Search	IOC
36	Landfill	3-6	Database Search	IOC, VOC, SOC
37	Landfill	3-6	Database Search	IOC, VOC, SOC
38	UST Site-Not Listed; Closed	6-10	Database Search	VOC, SOC
39	General Contractors	6-10	Database Search	IOC, VOC, SOC
40	Fertilizers (Wholesale)	6-10	Database Search	IOC
41	Remodeling/Repairing Building Contractors	6-10	Database Search	IOC, VOC, SOC
42	Farm Supplies (Wholesale)	6-10	Database Search	IOC, VOC, SOC
43	Roofing Contractors	6-10	Database Search	IOC, VOC, SOC
44	Septic Tanks-Cleaning & Repair	6-10	Database Search	IOC, VOC
45	Truck-Repairing & Service	6-10	Database Search	IOC, VOC, SOC
46	Tree Service	6-10	Database Search	VOC, SOC
47	Sheet Metal Fabricators	6-10	Database Search	IOC, VOC
48	RCRA Site	6-10	Database Search	IOC, VOC, SOC
49	Mine/Quarry	6-10	Database Search	IOC, VOC, SOC
50	Mine/Quarry	6-10	Database Search	IOC, VOC, SOC
51	Mine/Quarry	6-10	Database Search	IOC, VOC, SOC
52	Deep Injection Well	6-10	Database Search	IOC, VOC, SOC
53	Deep Injection Well	6-10	Database Search	IOC, VOC, SOC
54	Deep Injection Well	6-10	Database Search	IOC, VOC, SOC
55	Deep Injection Well	6-10	Database Search	IOC, VOC, SOC
56	Deep Injection Well	6-10	Database Search	IOC, VOC, SOC
57	SARA Site	6-10	Database Search	IOC, VOC, SOC
58	AST Site	6-10	Database Search	VOC, SOC
59	Wastewater Land Application Site	6-10	Database Search	IOC

¹ SARA = Superfund Amendments and Reauthorization Act, RCRA = Resource Conservation Recovery Act,

UST = underground storage tank, AST = aboveground storage tank

² TOT = time-of-travel (in years) for a potential contaminant to reach the wellhead,

³ IOC = inorganic chemical, VOC = volatile organic chemical, SOC = synthetic organic chemical

Table 9. Potential Contaminant Inventory for Well #10

Site	Source Description¹	TOT Zone (in years)²	Source Information	Potential Contaminants³
	Surface Water	0-3	GIS Map	IOC, VOC, SOC, Microbials
	Highway 91	0-3	GIS Map	IOC, VOC, SOC, Microbials
	Railroad	0-3	GIS Map	IOC, VOC, SOC, Microbials
1	LUST Site-Cleanup Incomplete; Impact Unknown	0-3	Database Inventory	VOC, SOC
2	LUST Site-Cleanup Completed; Impact Unknown	0-3	Database Inventory	VOC, SOC
3	LUST Site-Cleanup Completed; Impact Unknown	0-3	Database Inventory	VOC, SOC
4	LUST Site-Cleanup Completed; Impact Unknown	0-3	Database Inventory	VOC, SOC
6	UST Site-Not Listed; Closed	0-3	Database Inventory	VOC, SOC
7	UST Site-State Government; Closed	0-3	Database Inventory	VOC, SOC
8	UST Site-Gas Station; Open	0-3	Database Inventory	VOC, SOC
9	UST Site-Not Listed; Open	0-3	Database Inventory	VOC, SOC
10	UST Site-Commercial; Closed	0-3	Database Inventory	VOC, SOC
11	UST Site-Commercial; Closed	0-3	Database Inventory	VOC, SOC
12	UST Site-Gas Station; Closed	0-3	Database Inventory	VOC, SOC
13	UST Site-Gas Station; Open	0-3	Database Inventory	VOC, SOC
14	UST Site-State Government; Open	0-3	Database Inventory	VOC, SOC
15	UST Site-Not Listed; Closed	0-3	Database Inventory	VOC, SOC
16	UST Site-Contractor; Open	0-3	Database Inventory	VOC, SOC
17	UST Site-Local Government; Closed	0-3	Database Inventory	VOC, SOC
18	UST Site-Petroleum Distributor; Closed	0-3	Database Inventory	VOC, SOC
19	UST Site-Gas Station; Closed	0-3	Database Inventory	VOC, SOC
20	UST Site-Other; Open	0-3	Database Inventory	VOC, SOC
21	UST Site-Commercial; Open	0-3	Database Inventory	VOC, SOC
22	UST Site-Gas Station; Open	0-3	Database Inventory	VOC, SOC
23	UST Site-Gas Station; Open	0-3	Database Inventory	VOC, SOC
24	UST Site-State Government; Closed	0-3	Database Inventory	VOC, SOC
25	UST Site-Local Government; Closed	0-3	Database Inventory	VOC, SOC
26	UST Site-Railroad; Closed	0-3	Database Inventory	VOC, SOC
27	UST Site-Commercial; Closed	0-3	Database Inventory	VOC, SOC
28	UST Site-Gas Station; Open	0-3	Database Inventory	VOC, SOC
29	UST Site-Farm; Closed	0-3	Database Inventory	VOC, SOC
30	UST Site-Gas Station; Closed	0-3	Database Inventory	VOC, SOC
31	UST Site-State Government; Closed	0-3	Database Inventory	VOC, SOC
32	UST Site-Commercial; Closed	0-3	Database Inventory	VOC, SOC
33	UST Site-Gas Station; Closed	0-3	Database Inventory	VOC, SOC
34	UST Site-Gas Station; Open	0-3	Database Inventory	VOC, SOC
35	UST Site-Other; Closed	0-3	Database Inventory	VOC, SOC
36	Dairy	0-3	Database Inventory	IOC, Microbials
37	Dairy	0-3	Database Inventory	IOC, Microbials
38	Dairy	0-3	Database Inventory	IOC, Microbials
39	Dairy	0-3	Database Inventory	IOC, Microbials
40	Dairy	0-3	Database Inventory	IOC, Microbials
41	Dairy	0-3	Database Inventory	IOC, Microbials
42	Dairy	0-3	Database Inventory	IOC, Microbials
43	Dairy	0-3	Database Inventory	IOC, Microbials
44	Dairy	0-3	Database Inventory	IOC, Microbials
45	Hardware-Retail	0-3	Database Inventory	IOC, VOC, SOC
46	Plumbing Drain & Sewer Cleaning	0-3	Database Inventory	IOC, VOC, Microbials
48	Veterinarians	0-3	Database Inventory	IOC, VOC, Microbials

Site	Source Description ¹	TOT Zone (in years) ²	Source Information	Potential Contaminants ³
49	General Contractors	0-3	Database Inventory	IOC, VOC, SOC
50	State Government-National Security	0-3	Database Inventory	VOC, SOC
51	Automobile Parts & Supplies-Retail	0-3	Database Inventory	VOC, SOC
52	Wrecker Service	0-3	Database Inventory	IOC, VOC, SOC
53	Automobile Repairing & Service	0-3	Database Inventory	IOC, VOC, SOC
54	County Government-Transportation Program	0-3	Database Inventory	VOC, SOC
55	Hospitals	0-3	Database Inventory	IOC, SOC, Microbials
56	Laboratories-Testing	0-3	Database Inventory	IOC, VOC, SOC, Microbials
57	Veterinarians	0-3	Database Inventory	IOC, VOC, Microbials
58	Fire Departments	0-3	Database Inventory	VOC, SOC
59	Motorcycles & Motor Scooters-Dealers	0-3	Database Inventory	VOC, SOC
60	Livestock Buyers	0-3	Database Inventory	IOC, Microbials
61	Recreational Vehicles-Renting	0-3	Database Inventory	VOC, SOC
62	Veterinarians	0-3	Database Inventory	IOC, VOC, Microbials
63	Service Stations-Gasoline & Oil	0-3	Database Inventory	VOC, SOC
64	General Contractors	0-3	Database Inventory	IOC, VOC, SOC
65	Building Contractors	0-3	Database Inventory	IOC, VOC, SOC
67	Farming Service	0-3	Database Inventory	IOC, SOC
68	Buildings-Pre-Cut Prefab/Modular	0-3	Database Inventory	IOC, VOC, SOC
69	General Contractors	0-3	Database Inventory	IOC, VOC, SOC
70	Landscape Contractors	0-3	Database Inventory	IOC, VOC, SOC
71	Lawn Maintenance	0-3	Database Inventory	IOC, SOC
72	Funeral Directors	0-3	Database Inventory	VOC
73	Aircraft Charter Rental & Leasing	0-3	Database Inventory	VOC, SOC
74	Funeral Directors	0-3	Database Inventory	VOC
75	Meat Processing	0-3	Database Inventory	IOC, Microbials
76	Signs Manufacturers	0-3	Database Inventory	IOC, VOC, SOC
77	Cleaners	0-3	Database Inventory	VOC
78	Well Drilling	0-3	Database Inventory	IOC, VOC, SOC
79	Veterinarians	0-3	Database Inventory	IOC, VOC, Microbials
80	Tile-Ceramic-Contractors & Dealers	0-3	Database Inventory	VOC, SOC
81	Automobile Body-Repairing & Painting	0-3	Database Inventory	IOC, VOC, SOC
82	Service Stations-Gasoline & Oil	0-3	Database Inventory	VOC, SOC
83	Automobile Parts & Supplies-Retail	0-3	Database Inventory	VOC, SOC
84	Auto Machine Shop Service	0-3	Database Inventory	IOC, VOC, SOC
85	Service Stations-Gasoline & Oil	0-3	Database Inventory	VOC, SOC
86	Mufflers & Exhaust Systems-Engine	0-3	Database Inventory	IOC, VOC, SOC
87	Cut Stone & Stone Products Manufacturers	0-3	Database Inventory	IOC, VOC, SOC
88	Automobile Repairing & Service	0-3	Database Inventory	IOC, VOC, SOC
89	Automobile Dealers-Used Cars	0-3	Database Inventory	VOC, SOC
90	Service Stations-Gasoline & Oil	0-3	Database Inventory	VOC, SOC
91	Commercial Printing	0-3	Database Inventory	IOC, VOC
92	Newspapers (Publishers)	0-3	Database Inventory	IOC, VOC
93	Printers	0-3	Database Inventory	VOC
94	Funeral Directors	0-3	Database Inventory	VOC
95	Automobile Body-Repairing & Painting	0-3	Database Inventory	IOC, VOC, SOC
96	House & Building Movers	0-3	Database Inventory	VOC, SOC
97	Automobile Body-Repairing & Painting	0-3	Database Inventory	IOC, VOC, SOC
98	Automobile Body-Repairing & Painting	0-3	Database Inventory	IOC, VOC, SOC
99	Mufflers & Exhaust Systems-Engine	0-3	Database Inventory	IOC, VOC, SOC
101	Fertilizers (Wholesale)	0-3	Database Inventory	IOC
102	Oils-Fuel (Wholesale)	0-3	Database Inventory	VOC, SOC

Site	Source Description ¹	TOT Zone (in years) ²	Source Information	Potential Contaminants ³
104	Veterinarians	0-3	Database Inventory	IOC, VOC, Microbials
105	General Contractors	0-3	Database Inventory	IOC, VOC, SOC
106	Cleaners	0-3	Database Inventory	VOC
107	Truck Renting & Leasing	0-3	Database Inventory	VOC, SOC
108	Fertilizers (Wholesale)	0-3	Database Inventory	IOC
109	Veterinarians	0-3	Database Inventory	IOC, VOC, Microbials
111	Cheese Processors	0-3	Database Inventory	IOC, VOC, Microbials
113	Veterinarians	0-3	Database Inventory	IOC, VOC, Microbials
114	Photographers-Portrait	0-3	Database Inventory	VOC
115	Screen Printing	0-3	Database Inventory	VOC
116	Roofing Contractors	0-3	Database Inventory	IOC, VOC, SOC
117	Automobile Repairing & Service	0-3	Database Inventory	IOC, VOC, SOC
118	Rental Service-Stores & Yards	0-3	Database Inventory	VOC, SOC
119	Truck Renting & Leasing	0-3	Database Inventory	VOC, SOC
120	Delivery Service	0-3	Database Inventory	VOC, SOC
121	Roofing Contractors	0-3	Database Inventory	IOC, VOC, SOC
122	Remodeling/Repairing Building Contractors	0-3	Database Inventory	IOC, VOC, SOC
123	Automobile Dealers-Used Cars	0-3	Database Inventory	VOC, SOC
124	Oils-Fuel (Wholesale)	0-3	Database Inventory	VOC, SOC
125	Welding	0-3	Database Inventory	IOC, VOC
126	CERCLA Site	0-3	Database Inventory	IOC, VOC, SOC
127	RCRA Site	0-3	Database Inventory	IOC, VOC, SOC
128	RCRA Site	0-3	Database Inventory	IOC, VOC, SOC
129	RCRA Site	0-3	Database Inventory	IOC, VOC, SOC
130	RCRA Site	0-3	Database Inventory	IOC, VOC, SOC
131	RCRA Site	0-3	Database Inventory	VOC
132	RCRA Site	0-3	Database Inventory	IOC
133	RCRA Site	0-3	Database Inventory	IOC, SOC
134	RCRA Site	0-3	Database Inventory	VOC
135	RCRA Site	0-3	Database Inventory	IOC, SOC
136	Mine/Quarry	0-3	Database Inventory	IOC, VOC, SOC
137	Mine/Quarry	0-3	Database Inventory	IOC, VOC, SOC
138	SARA Site	0-3	Database Inventory	IOC
139	SARA Site	0-3	Database Inventory	IOC, VOC, SOC
140	SARA Site	0-3	Database Inventory	IOC
141	SARA Site	0-3	Database Inventory	IOC, SOC
142	SARA Site	0-3	Database Inventory	VOC, SOC
143	SARA Site	0-3	Database Inventory	VOC, SOC
145	SARA Site	0-3	Database Inventory	IOC, VOC, SOC
146	SARA Site	0-3	Database Inventory	IOC, VOC, Microbials
147	SARA Site	0-3	Database Inventory	IOC, VOC, SOC
148	SARA Site	0-3	Database Inventory	IOC, VOC, SOC
149	SARA Site	0-3	Database Inventory	VOC, SOC
150	SARA Site	0-3	Database Inventory	IOC, SOC
151	SARA Site	0-3	Database Inventory	VOC, SOC
152	Recharge Point	0-3	Database Inventory	IOC, VOC, SOC, Microbials
153	Recharge Point	0-3	Database Inventory	IOC, VOC, SOC, Microbials
154	AST Site	0-3	Database Inventory	VOC, SOC
155	AST Site	0-3	Database Inventory	VOC, SOC
156	AST Site	0-3	Database Inventory	VOC, SOC
157	AST Site	0-3	Database Inventory	VOC, SOC
158	AST Site	0-3	Database Inventory	VOC, SOC
159	Group 1 Site	0-3	Database Inventory	

Site	Source Description ¹	TOT Zone (in years) ²	Source Information	Potential Contaminants ³
439	Hot Lunch Program	0-3	Database Inventory	IOC, Microbials
160	UST Site-Farm; Closed	3-6	Database Inventory	VOC, SOC
161	UST Site-Not Listed; Closed	3-6	Database Inventory	VOC, SOC
162	UST Site-Utilities; Closed	3-6	Database Inventory	VOC, SOC
163	UST Site-Farm; Closed	3-6	Database Inventory	VOC, SOC
164	UST Site-Not Listed; Closed	3-6	Database Inventory	VOC, SOC
165	Dairy	3-6	Database Inventory	IOC
166	Dairy	3-6	Database Inventory	IOC
167	Dairy	3-6	Database Inventory	IOC
168	Dairy	3-6	Database Inventory	IOC
169	Pumps-Manufacturers	3-6	Database Inventory	IOC, VOC, SOC
170	Trucking-Contract Hauling	3-6	Database Inventory	VOC, SOC
171	Tire-Retreading/Repair	3-6	Database Inventory	VOC
172	RCRA Site	3-6	Database Inventory	VOC, SOC
173	Mine/Quarry	3-6	Database Inventory	IOC, VOC, SOC
174	Mine/Quarry	3-6	Database Inventory	IOC, VOC, SOC
175	Mine/Quarry	3-6	Database Inventory	IOC, VOC, SOC
176	Deep Injection Well	3-6	Database Inventory	IOC, VOC, SOC
177	Deep Injection Well	3-6	Database Inventory	IOC, VOC, SOC
178	SARA Site	3-6	Database Inventory	IOC, VOC, SOC
179	Group 1 Site	3-6	Database Inventory	
180	Wastewater Land Application Site	3-6	Database Inventory	IOC
181	Wastewater Land Application Site	3-6	Database Inventory	IOC
190	LUST Site-Cleanup Completed; Impact Unknown	6-10	Database Inventory	VOC, SOC
191	UST Site-Farm; Closed	6-10	Database Inventory	VOC, SOC
192	UST Site-Gas Station; Open	6-10	Database Inventory	VOC, SOC
193	UST Site-Gas Station; Closed	6-10	Database Inventory	VOC, SOC
194	UST Site-State Government; Closed	6-10	Database Inventory	VOC, SOC
195	UST Site-Gas Station; Open	6-10	Database Inventory	VOC, SOC
196	UST Site-Local Government; Closed	6-10	Database Inventory	VOC, SOC
197	UST Site-Gas Station; Closed	6-10	Database Inventory	VOC, SOC
198	UST Site-Not Listed; Open	6-10	Database Inventory	VOC, SOC
199	UST Site-Not Listed; Closed	6-10	Database Inventory	VOC, SOC
200	UST Site-Contractor; Closed	6-10	Database Inventory	VOC, SOC
201	UST Site-Not Listed; Closed	6-10	Database Inventory	VOC, SOC
202	UST Site-Gas Station; Open	6-10	Database Inventory	VOC, SOC
203	UST Site-Other; Closed	6-10	Database Inventory	VOC, SOC
204	UST Site-Gas Station; Open	6-10	Database Inventory	VOC, SOC
205	UST Site-Gas Station; Closed	6-10	Database Inventory	VOC, SOC
206	UST Site-Gas Station; Open	6-10	Database Inventory	VOC, SOC
207	UST Site-Other; Closed	6-10	Database Inventory	VOC, SOC
208	UST Site-Commercial; Closed	6-10	Database Inventory	VOC, SOC
209	UST Site-Not Listed; Closed	6-10	Database Inventory	VOC, SOC
210	UST Site-Local Government; Closed	6-10	Database Inventory	VOC, SOC
211	UST Site-Local Government; Closed	6-10	Database Inventory	VOC, SOC
212	UST Site-Gas Station; Open	6-10	Database Inventory	VOC, SOC
213	UST Site-Other; Open	6-10	Database Inventory	VOC, SOC
214	UST Site-Other; Closed	6-10	Database Inventory	VOC, SOC
215	UST Site-Other; Closed	6-10	Database Inventory	VOC, SOC
216	UST Site-Gas Station; Open	6-10	Database Inventory	VOC, SOC
217	UST Site-Gas Station; Open	6-10	Database Inventory	VOC, SOC
218	UST Site-Gas Station; Open	6-10	Database Inventory	VOC, SOC
219	UST Site-Local Government; Closed	6-10	Database Inventory	VOC, SOC

Site	Source Description ¹	TOT Zone (in years) ²	Source Information	Potential Contaminants ³
220	UST Site-Commercial; Closed	6-10	Database Inventory	VOC, SOC
221	UST Site-Other; Closed	6-10	Database Inventory	VOC, SOC
222	UST Site-Gas Station; Open	6-10	Database Inventory	VOC, SOC
223	Storage-Household & Commercial	6-10	Database Inventory	IOC, VOC, SOC
224	Pest Control	6-10	Database Inventory	SOC
225	Limousine Service	6-10	Database Inventory	VOC, SOC
226	Plumbing Drain & Sewer Cleaning	6-10	Database Inventory	IOC, VOC
227	Boilers-Repairing & Cleaning	6-10	Database Inventory	VOC
228	Rental Service-Stores & Yards	6-10	Database Inventory	VOC, SOC
229	Farm Equipment (Wholesale)	6-10	Database Inventory	VOC, SOC
230	Veterinarians	6-10	Database Inventory	IOC, VOC
231	Fire Damage Restoration	6-10	Database Inventory	VOC, SOC
232	Taxidermists	6-10	Database Inventory	VOC
233	Laboratories-Medical	6-10	Database Inventory	IOC, VOC, SOC
234	Excavating Contractors	6-10	Database Inventory	IOC, VOC, SOC
235	Hospitals	6-10	Database Inventory	IOC, SOC
236	Automobile Renting & Leasing	6-10	Database Inventory	VOC, SOC
237	Grain Elevators	6-10	Database Inventory	IOC, SOC
238	Plumbing Drain & Sewer Cleaning	6-10	Database Inventory	IOC, VOC
239	General Contractors	6-10	Database Inventory	IOC, VOC, SOC
240	Automobile Customizing	6-10	Database Inventory	IOC, VOC, SOC
241	Packaging Machinery-Wholesale	6-10	Database Inventory	VOC
242	Farm Supplies (Wholesale)	6-10	Database Inventory	IOC, VOC, SOC
243	Wood Products-Manufacturers	6-10	Database Inventory	IOC, VOC, SOC
244	Trucking-Liquid & Dry Bulk	6-10	Database Inventory	VOC, SOC
245	Printers	6-10	Database Inventory	VOC
246	Paving Contractors	6-10	Database Inventory	VOC, SOC
247	Carpet & Rug Cleaners	6-10	Database Inventory	VOC
248	Water Treatment Equip Service & Supplies	6-10	Database Inventory	IOC, SOC
249	Tire-Dealers Retail	6-10	Database Inventory	VOC, SOC
250	Building Contractors	6-10	Database Inventory	IOC, VOC, SOC
251	Building Contractors	6-10	Database Inventory	IOC, VOC, SOC
252	Auto Radiator-Repair	6-10	Database Inventory	IOC, VOC, SOC
253	Automobile Repairing & Service	6-10	Database Inventory	IOC, VOC, SOC
254	Funeral Directors	6-10	Database Inventory	VOC
255	Funeral Directors	6-10	Database Inventory	VOC
256	Machine Shops	6-10	Database Inventory	IOC, VOC, SOC
257	Concrete Contractors	6-10	Database Inventory	IOC, VOC, SOC
258	Automobile Body-Repairing & Painting	6-10	Database Inventory	IOC, VOC, SOC
259	Laboratories-Dental	6-10	Database Inventory	IOC, VOC, SOC
260	Automobile Body-Repairing & Painting	6-10	Database Inventory	IOC, VOC, SOC
261	Automobile Parts & Supplies-Retail	6-10	Database Inventory	VOC, SOC
262	Automobile Body-Repairing & Painting	6-10	Database Inventory	IOC, VOC, SOC
263	Automobile Repairing & Service	6-10	Database Inventory	IOC, VOC, SOC
264	Laboratories-Dental	6-10	Database Inventory	IOC, VOC, SOC
265	Photo Finishing-Retail	6-10	Database Inventory	VOC
266	Funeral Directors	6-10	Database Inventory	VOC
267	Welding	6-10	Database Inventory	IOC, VOC
268	Car Washing & Polishing	6-10	Database Inventory	IOC, VOC, SOC
269	Veterinarians	6-10	Database Inventory	IOC, VOC
270	Furniture-Repairing & Refinishing	6-10	Database Inventory	VOC, SOC
271	Automobile Body-Repairing & Painting	6-10	Database Inventory	IOC, VOC, SOC
272	Labels-Paper Manufacturers	6-10	Database Inventory	VOC

Site	Source Description ¹	TOT Zone (in years) ²	Source Information	Potential Contaminants ³
273	Cleaners	6-10	Database Inventory	VOC
274	Laboratories-Dental	6-10	Database Inventory	IOC, VOC, SOC
275	Fire Damage Restoration	6-10	Database Inventory	VOC, SOC
276	Converted Paper/Paperboard Products	6-10	Database Inventory	SOC
277	Hospitals	6-10	Database Inventory	IOC, SOC
278	Veterinarians	6-10	Database Inventory	IOC, VOC
279	Drapery & Curtain Cleaners	6-10	Database Inventory	VOC
280	Storage-Household & Commercial	6-10	Database Inventory	IOC, VOC, SOC
281	Automobile Repairing & Service	6-10	Database Inventory	IOC, VOC, SOC
282	Janitor Service	6-10	Database Inventory	VOC
283	Automobile Body-Repairing & Painting	6-10	Database Inventory	IOC, VOC, SOC
284	Storage-Household & Commercial	6-10	Database Inventory	IOC, VOC, SOC
285	Oils-Fuel (Wholesale)	6-10	Database Inventory	VOC, SOC
286	Material Handling Equipment (Wholesale)	6-10	Database Inventory	IOC, VOC, SOC
287	Home Builders	6-10	Database Inventory	IOC, VOC, SOC
288	Veterinarians	6-10	Database Inventory	IOC, VOC
289	Paving Contractors	6-10	Database Inventory	VOC, SOC
290	General Contractors	6-10	Database Inventory	IOC, VOC, SOC
291	Delivery Service	6-10	Database Inventory	VOC, SOC
292	Bathtubs & Sinks-Repair & Refinish	6-10	Database Inventory	IOC, VOC, SOC
293	Storage-Household & Commercial	6-10	Database Inventory	IOC, VOC, SOC
294	Signs Manufacturers	6-10	Database Inventory	IOC, VOC, SOC
295	General Contractors	6-10	Database Inventory	IOC, VOC, SOC
296	Carpet & Rug Cleaners	6-10	Database Inventory	VOC
297	Janitor Service	6-10	Database Inventory	VOC
298	Home Builders	6-10	Database Inventory	IOC, VOC, SOC
299	Water Treatment Equip Service & Supplies	6-10	Database Inventory	IOC, SOC
300	Hospitals	6-10	Database Inventory	IOC, SOC
301	Snow Removal Service	6-10	Database Inventory	VOC, SOC
302	Trailer-Manufacturers	6-10	Database Inventory	IOC, VOC, SOC
303	Sewage Disposal Systems	6-10	Database Inventory	IOC, VOC, SOC
304	Publishers-Periodical	6-10	Database Inventory	IOC, VOC
305	Photographers-Portrait	6-10	Database Inventory	VOC
306	Plastics & Plastic Products	6-10	Database Inventory	VOC
307	Paving Contractors	6-10	Database Inventory	VOC, SOC
308	Tire-Dealers Retail	6-10	Database Inventory	VOC, SOC
309	Transmissions-Automobile	6-10	Database Inventory	IOC, VOC, SOC
310	Wheel Alignment-Frame & Axle Service	6-10	Database Inventory	VOC, SOC
311	Automobile Dealers-Used Cars	6-10	Database Inventory	VOC, SOC
312	Tile-Ceramic-Contractors & Dealers	6-10	Database Inventory	VOC, SOC
313	General Contractors	6-10	Database Inventory	IOC, VOC, SOC
314	Typesetting (Manufacturers)	6-10	Database Inventory	VOC
315	Concrete Contractors	6-10	Database Inventory	IOC, VOC, SOC
316	Ornamental Metal Work Manufacturers	6-10	Database Inventory	IOC, VOC
317	Storage-Household & Commercial	6-10	Database Inventory	IOC, VOC, SOC
318	Livestock-Dealers (Wholesale)	6-10	Database Inventory	IOC
319	General Contractors	6-10	Database Inventory	IOC, VOC, SOC
320	Wrecker Service	6-10	Database Inventory	IOC, VOC, SOC
321	Landscape Contractors	6-10	Database Inventory	IOC, VOC, SOC
322	Laboratories-Dental	6-10	Database Inventory	IOC, VOC, SOC
323	Artificial Limbs-Manufacturers	6-10	Database Inventory	VOC

Site	Source Description ¹	TOT Zone (in years) ²	Source Information	Potential Contaminants ³
324	Roofing Contractors	6-10	Database Inventory	IOC, VOC, SOC
325	Veterinarians	6-10	Database Inventory	IOC, VOC
326	Excavating Contractors	6-10	Database Inventory	IOC, VOC, SOC
327	Printers	6-10	Database Inventory	VOC
328	Photo Finishing-Retail	6-10	Database Inventory	VOC
329	Horse Breeders	6-10	Database Inventory	IOC
330	X-Ray Laboratories-Medical	6-10	Database Inventory	IOC, VOC, SOC
331	Pest Control	6-10	Database Inventory	SOC
332	Plastics-High Pressure Laminates	6-10	Database Inventory	VOC
333	Paint-Retail	6-10	Database Inventory	VOC
334	Boat Repairing	6-10	Database Inventory	IOC, VOC, SOC
335	Excavating Contractors	6-10	Database Inventory	IOC, VOC, SOC
336	Boat Dealers	6-10	Database Inventory	VOC, SOC
337	Pumice (Manufacturers)	6-10	Database Inventory	VOC, SOC
338	Auto Detail & Clean-Up Service	6-10	Database Inventory	IOC, VOC, SOC
339	Automobile Repairing & Service	6-10	Database Inventory	IOC, VOC, SOC
340	Snow Removal Equipment Retail	6-10	Database Inventory	VOC, SOC
341	Rental Service-Stores & Yards	6-10	Database Inventory	VOC, SOC
342	Home Builders	6-10	Database Inventory	IOC, VOC, SOC
343	Four Wheel Drive-Repair & Service	6-10	Database Inventory	IOC, VOC, SOC
344	Landscape Contractors	6-10	Database Inventory	IOC, VOC, SOC
345	Storage-Household & Commercial	6-10	Database Inventory	IOC, VOC, SOC
346	General Contractors	6-10	Database Inventory	IOC, VOC, SOC
347	Veterinarians	6-10	Database Inventory	IOC, VOC
348	Tire-Dealers Retail	6-10	Database Inventory	VOC, SOC
349	Septic Tanks-Cleaning & Repair	6-10	Database Inventory	IOC, VOC
350	Automobile Parts & Supplies-Retail	6-10	Database Inventory	VOC, SOC
351	Truck Renting & Leasing	6-10	Database Inventory	VOC, SOC
352	Golf Courses-Public	6-10	Database Inventory	IOC, VOC, SOC
353	Photographers-Portrait	6-10	Database Inventory	VOC
354	Paint-Retail	6-10	Database Inventory	VOC
355	Veterinarians	6-10	Database Inventory	IOC, VOC
356	Excavating Contractors	6-10	Database Inventory	IOC, VOC, SOC
357	Signs Manufacturers	6-10	Database Inventory	IOC, VOC, SOC
358	Bicycles-Dealers	6-10	Database Inventory	VOC, SOC
359	General Contractors	6-10	Database Inventory	IOC, VOC, SOC
360	Laboratories-Medical	6-10	Database Inventory	IOC, VOC, SOC
361	Car Washing & Polishing	6-10	Database Inventory	IOC, VOC, SOC
362	Steel Erectors	6-10	Database Inventory	IOC, VOC
363	Washers-Pressure	6-10	Database Inventory	IOC, VOC, SOC
364	Electric Equipment & Supplies-Wholesale	6-10	Database Inventory	IOC, VOC
365	Automobile Repairing & Service	6-10	Database Inventory	IOC, VOC, SOC
366	Automobile Repairing & Service	6-10	Database Inventory	IOC, VOC, SOC
367	Automobile Repairing & Service	6-10	Database Inventory	IOC, VOC, SOC
368	Garden Centers	6-10	Database Inventory	IOC, SOC
369	Car Washing & Polishing	6-10	Database Inventory	IOC, VOC, SOC
370	Painters	6-10	Database Inventory	VOC
371	Farms	6-10	Database Inventory	IOC, SOC
372	Cleaners	6-10	Database Inventory	VOC
373	Laboratories-Medical	6-10	Database Inventory	IOC, VOC, SOC
374	X-Ray Laboratories-Medical	6-10	Database Inventory	IOC, VOC, SOC
375	Race Tracks	6-10	Database Inventory	IOC
376	General Contractors	6-10	Database Inventory	IOC, VOC, SOC

Site	Source Description ¹	TOT Zone (in years) ²	Source Information	Potential Contaminants ³
377	Truck-Repairing & Service	6-10	Database Inventory	IOC, VOC, SOC
378	Laboratories-Dental	6-10	Database Inventory	IOC, VOC, SOC
379	Laboratories-Dental	6-10	Database Inventory	IOC, VOC, SOC
380	Excavating Contractors	6-10	Database Inventory	IOC, VOC, SOC
381	Janitor Service	6-10	Database Inventory	VOC
382	Automobile Repairing & Service	6-10	Database Inventory	IOC, VOC, SOC
383	Publishers-Directory & Guide	6-10	Database Inventory	IOC, VOC
384	Printers	6-10	Database Inventory	VOC
385	Truck Renting & Leasing	6-10	Database Inventory	VOC, SOC
386	Truck Renting & Leasing	6-10	Database Inventory	VOC, SOC
387	Automobile Lubrication Service	6-10	Database Inventory	IOC, VOC, SOC
388	Automobile Repairing & Service	6-10	Database Inventory	IOC, VOC, SOC
389	Dairies	6-10	Database Inventory	IOC
390	General Contractors	6-10	Database Inventory	IOC, VOC, SOC
391	Concrete Contractors	6-10	Database Inventory	IOC, VOC, SOC
392	Laboratories-Dental	6-10	Database Inventory	IOC, VOC, SOC
393	Automobile Repairing & Service	6-10	Database Inventory	IOC, VOC, SOC
394	Tree Service	6-10	Database Inventory	VOC, SOC
395	Sheet Metal Fabricators	6-10	Database Inventory	IOC, VOC
396	RCRA Site	6-10	Database Inventory	IOC, VOC, SOC
397	RCRA Site	6-10	Database Inventory	IOC, VOC, SOC
398	RCRA Site	6-10	Database Inventory	VOC
399	RCRA Site	6-10	Database Inventory	IOC, VOC, SOC
400	RCRA Site	6-10	Database Inventory	IOC, VOC, SOC
401	Mine/Quarry	6-10	Database Inventory	IOC, VOC, SOC
402	Mine/Quarry	6-10	Database Inventory	IOC, VOC, SOC
403	Mine/Quarry	6-10	Database Inventory	IOC, VOC, SOC
404	Mine/Quarry	6-10	Database Inventory	IOC, VOC, SOC
405	Deep Injection Well	6-10	Database Inventory	IOC, VOC, SOC
406	Deep Injection Well	6-10	Database Inventory	IOC, VOC, SOC
407	Deep Injection Well	6-10	Database Inventory	IOC, VOC, SOC
408	Deep Injection Well	6-10	Database Inventory	IOC, VOC, SOC
409	Deep Injection Well	6-10	Database Inventory	IOC, VOC, SOC
410	Deep Injection Well	6-10	Database Inventory	IOC, VOC, SOC
411	Deep Injection Well	6-10	Database Inventory	IOC, VOC, SOC
412	Deep Injection Well	6-10	Database Inventory	IOC, VOC, SOC
413	Deep Injection Well	6-10	Database Inventory	IOC, VOC, SOC
414	Deep Injection Well	6-10	Database Inventory	IOC, VOC, SOC
415	Deep Injection Well	6-10	Database Inventory	IOC, VOC, SOC
416	Deep Injection Well	6-10	Database Inventory	IOC, VOC, SOC
417	Deep Injection Well	6-10	Database Inventory	IOC, VOC, SOC
418	Deep Injection Well	6-10	Database Inventory	IOC, VOC, SOC
419	Deep Injection Well	6-10	Database Inventory	IOC, VOC, SOC
420	Deep Injection Well	6-10	Database Inventory	IOC, VOC, SOC
421	Deep Injection Well	6-10	Database Inventory	IOC, VOC, SOC
422	Deep Injection Well	6-10	Database Inventory	IOC, VOC, SOC
423	Deep Injection Well	6-10	Database Inventory	IOC, VOC, SOC
424	Deep Injection Well	6-10	Database Inventory	IOC, VOC, SOC
425	Deep Injection Well	6-10	Database Inventory	IOC, VOC, SOC
426	Deep Injection Well	6-10	Database Inventory	IOC, VOC, SOC
427	Deep Injection Well	6-10	Database Inventory	IOC, VOC, SOC
428	Deep Injection Well	6-10	Database Inventory	IOC, VOC, SOC
429	Deep Injection Well	6-10	Database Inventory	IOC, VOC, SOC
430	SARA Site	6-10	Database Inventory	IOC, VOC, SOC

Site	Source Description ¹	TOT Zone (in years) ²	Source Information	Potential Contaminants ³
431	SARA Site	6-10	Database Inventory	IOC, VOC, SOC, Microbials
432	SARA Site	6-10	Database Inventory	IOC, VOC, SOC
433	SARA Site	6-10	Database Inventory	IOC, VOC, SOC
434	SARA Site	6-10	Database Inventory	VOC, SOC
435	SARA Site	6-10	Database Inventory	VOC, SOC
436	SARA Site	6-10	Database Inventory	IOC
437	Recharge Point	6-10	Database Inventory	IOC, VOC, SOC
438	Group 1 Site	6-10	Database Inventory	

¹ SARA = Superfund Amendments and Reauthorization Act, RCRA = Resource Conservation Recovery Act, CERCLA = Comprehensive Environmental Response Compensation and Liability Act, UST = underground storage tank, LUST = leaking underground storage tank, AST = aboveground storage tank

² TOT = time-of-travel (in years) for a potential contaminant to reach the wellhead,

³ IOC = inorganic chemical, VOC = volatile organic chemical, SOC = synthetic organic chemical

Table 10. Potential Contaminant Inventory for Well #11

Site	Source Description ¹	TOT Zone (in years) ²	Source Information	Potential Contaminants ³
	Surface Water	0-3	GIS Map	IOC, VOC, SOC, Microbials
	Highway 26	0-3	GIS Map	IOC, VOC, SOC, Microbials
1	UST Site-Farm; Closed	0-3	Database Search	VOC, SOC
2	Dairy	0-3	Database Search	IOC, Microbials
3	Dairy	0-3	Database Search	IOC, Microbials
4	Dairy	0-3	Database Search	IOC, Microbials
5	Dairy	0-3	Database Search	IOC, Microbials
6	Foundries-Steel	0-3	Database Search	IOC, VOC, SOC
7	Deep Injection Well	0-3	Database Search	IOC, VOC, SOC, Microbials
8	SARA Site	0-3	Database Search	IOC, VOC
9	Group 1 Site	0-3	Database Search	
10	Wastewater Land Application Site	0-3	Database Search	IOC, Microbials
11	Landfill	0-3	Database Search	IOC, VOC, SOC, Microbials
12	Landfill	0-3	Database Search	IOC, VOC, SOC, Microbials
13	UST Site-Not Listed; Closed	3-6	Database Search	VOC, SOC
14	UST Site-Farm; Closed	3-6	Database Search	VOC, SOC
15	Dairy	3-6	Database Search	IOC
16	Landscape Contractors	3-6	Database Search	IOC, VOC, SOC
17	Trucking-Heavy Hauling	3-6	Database Search	VOC, SOC
18	Truck-Repairing & Service	3-6	Database Search	IOC, VOC, SOC
19	Wrecker Service	3-6	Database Search	IOC, VOC, SOC
20	Plumbing Drain & Sewer Cleaning	3-6	Database Search	IOC, VOC
21	Well Drilling	3-6	Database Search	IOC, VOC, SOC
22	Truck Stops	3-6	Database Search	VOC, SOC
23	Limousine Service	3-6	Database Search	VOC, SOC
24	CERCLA Site	3-6	Database Search	IOC, VOC, SOC
25	Mine/Quarry	3-6	Database Search	IOC, VOC, SOC
26	Mine/Quarry	3-6	Database Search	IOC, VOC, SOC
27	Deep Injection Well	3-6	Database Search	IOC, VOC, SOC
28	Deep Injection Well	3-6	Database Search	IOC, VOC, SOC
29	Deep Injection Well	3-6	Database Search	IOC, VOC, SOC
30	Deep Injection Well	3-6	Database Search	IOC, VOC, SOC
31	Deep Injection Well	3-6	Database Search	IOC, VOC, SOC
32	SARA Site	3-6	Database Search	IOC, VOC, SOC
33	Recharge Point	3-6	Database Search	IOC, VOC, SOC
34	Recharge Point	3-6	Database Search	IOC, VOC, SOC

Site	Source Description ¹	TOT Zone (in years) ²	Source Information	Potential Contaminants ³
35	Recharge Point	3-6	Database Search	IOC, VOC, SOC
36	Recharge Point	3-6	Database Search	IOC, VOC, SOC
37	Recharge Point	3-6	Database Search	IOC, VOC, SOC
38	Recharge Point	3-6	Database Search	IOC, VOC, SOC
39	Recharge Point	3-6	Database Search	IOC, VOC, SOC
40	Recharge Point	3-6	Database Search	IOC, VOC, SOC
41	Recharge Point	3-6	Database Search	IOC, VOC, SOC
42	Recharge Point	3-6	Database Search	IOC, VOC, SOC
43	Recharge Point	3-6	Database Search	IOC, VOC, SOC
44	Recharge Point	3-6	Database Search	IOC, VOC, SOC
45	Recharge Point	3-6	Database Search	IOC, VOC, SOC
46	Recharge Point	3-6	Database Search	IOC, VOC, SOC
47	Recharge Point	3-6	Database Search	IOC, VOC, SOC
48	Recharge Point	3-6	Database Search	IOC, VOC, SOC
49	Recharge Point	3-6	Database Search	IOC, VOC, SOC
50	LUST Site-Cleanup Completed; Impact Unknown	6-10	Database Search	VOC, SOC
51	LUST Site-Cleanup Completed; Impact Unknown	6-10	Database Search	VOC, SOC
52	LUST Site-Cleanup Completed; Impact Unknown	6-10	Database Search	VOC, SOC
53	UST Site-Commercial; Closed	6-10	Database Search	VOC, SOC
54	UST Site-Gas Station; Open	6-10	Database Search	VOC, SOC
55	UST Site-Other; Closed	6-10	Database Search	VOC, SOC
56	UST Site-Other; Open	6-10	Database Search	VOC, SOC
57	UST Site-Not Listed; Closed	6-10	Database Search	VOC, SOC
58	UST Site-Gas Station; Closed	6-10	Database Search	VOC, SOC
59	UST Site-Gas Station; Open	6-10	Database Search	VOC, SOC
60	UST Site-Gas Station; Closed	6-10	Database Search	VOC, SOC
61	UST Site-Commercial; Closed	6-10	Database Search	VOC, SOC
62	UST Site-Gas Station; Open	6-10	Database Search	VOC, SOC
63	UST Site-Auto Dealership; Closed	6-10	Database Search	VOC, SOC
64	UST Site-Utilities; Closed	6-10	Database Search	VOC, SOC
65	UST Site-Not Listed; Closed	6-10	Database Search	VOC, SOC
66	UST Site-Not Listed; Closed	6-10	Database Search	VOC, SOC
67	UST Site-Not Listed; Closed	6-10	Database Search	VOC, SOC
68	UST Site-Other; Closed	6-10	Database Search	VOC, SOC
69	UST Site-Contractor; Open	6-10	Database Search	VOC, SOC
70	UST Site-Gas Station; Open	6-10	Database Search	VOC, SOC
71	UST Site-Not Listed; Closed	6-10	Database Search	VOC, SOC
72	UST Site-Local Government; Closed	6-10	Database Search	VOC, SOC
73	UST Site-Not Listed; Closed	6-10	Database Search	VOC, SOC
74	UST Site-Truck/Transporter; Open	6-10	Database Search	VOC, SOC
75	UST Site-Auto Dealership; Closed	6-10	Database Search	VOC, SOC
76	UST Site-Not Listed; Closed	6-10	Database Search	VOC, SOC
77	UST Site-Gas Station; Open	6-10	Database Search	VOC, SOC
78	UST Site-Other; Closed	6-10	Database Search	VOC, SOC
79	UST Site-Local Government; Open	6-10	Database Search	VOC, SOC
80	UST Site-Gas Station; Closed	6-10	Database Search	VOC, SOC
81	UST Site-Utilities; Closed	6-10	Database Search	VOC, SOC
82	UST Site-Commercial; Closed	6-10	Database Search	VOC, SOC
83	UST Site-State Government; Closed	6-10	Database Search	VOC, SOC
84	UST Site-Auto Dealership; Closed	6-10	Database Search	VOC, SOC
85	UST Site-Auto Dealership; Closed	6-10	Database Search	VOC, SOC

Site	Source Description ¹	TOT Zone (in years) ²	Source Information	Potential Contaminants ³
86	UST Site-Gas Station; Open	6-10	Database Search	VOC, SOC
87	UST Site-Not Listed; Open	6-10	Database Search	VOC, SOC
88	UST Site-Not Listed; Closed	6-10	Database Search	VOC, SOC
89	UST Site-Commercial; Closed	6-10	Database Search	VOC, SOC
90	UST Site-Gas Station; Open	6-10	Database Search	VOC, SOC
91	UST Site-Not Listed; Closed	6-10	Database Search	VOC, SOC
92	UST Site-Other; Closed	6-10	Database Search	VOC, SOC
93	UST Site-Other; Closed	6-10	Database Search	VOC, SOC
94	UST Site-Gas Station; Open	6-10	Database Search	VOC, SOC
95	UST Site-Commercial; Closed	6-10	Database Search	VOC, SOC
96	UST Site-Gas Station; Closed	6-10	Database Search	VOC, SOC
97	UST Site-Gas Station; Closed	6-10	Database Search	VOC, SOC
98	UST Site-Gas Station; Open	6-10	Database Search	VOC, SOC
99	UST Site-Truck/Transporter; Open	6-10	Database Search	VOC, SOC
100	UST Site-Gas Station; Closed	6-10	Database Search	VOC, SOC
101	Dairy	6-10	Database Search	IOC
102	Automobile Dealers-Used Cars	6-10	Database Search	VOC, SOC
103	Automobile Repairing & Service	6-10	Database Search	IOC, VOC, SOC
104	Hydraulic Equipment-Repairing	6-10	Database Search	VOC, SOC
105	Trucking	6-10	Database Search	VOC, SOC
106	Aircraft Servicing & Maintenance	6-10	Database Search	IOC, VOC, SOC
107	Veterinarians	6-10	Database Search	IOC, VOC
108	Concrete Contractors	6-10	Database Search	IOC, VOC, SOC
109	Boat Dealers	6-10	Database Search	VOC, SOC
110	Steel Fabricators	6-10	Database Search	IOC, VOC
111	Oils-Fuel (Wholesale)	6-10	Database Search	VOC, SOC
112	General Contractors	6-10	Database Search	IOC, VOC, SOC
113	Landscape Contractors	6-10	Database Search	IOC, VOC, SOC
114	Automobile Electric Service	6-10	Database Search	IOC, VOC, SOC
115	Automobile Renting & Leasing	6-10	Database Search	VOC, SOC
116	Automobile Dealers-New Cars	6-10	Database Search	VOC, SOC
117	Automobile Dealers-Used Cars	6-10	Database Search	VOC, SOC
118	Industrial Machinery/Equipment	6-10	Database Search	VOC, SOC
119	General Contractors	6-10	Database Search	IOC, VOC, SOC
120	Tree Service	6-10	Database Search	VOC, SOC
121	Garbage Collection	6-10	Database Search	IOC, VOC, SOC
122	Garbage Collection	6-10	Database Search	IOC, VOC, SOC
123	Property Maintenance	6-10	Database Search	IOC, SOC
124	Boxes-Folding-Manufacturers	6-10	Database Search	VOC
125	Grinding Wheels (Manufacturers)	6-10	Database Search	IOC, VOC
126	Service Stations-Gasoline & Oil	6-10	Database Search	VOC, SOC
127	Service Stations-Gasoline & Oil	6-10	Database Search	VOC, SOC
128	Automobile Lubrication Service	6-10	Database Search	IOC, VOC, SOC
129	Automobile Dealers-New Cars	6-10	Database Search	VOC, SOC
130	Automobile Renting & Leasing	6-10	Database Search	VOC, SOC
131	Landscape Contractors	6-10	Database Search	IOC, VOC, SOC
132	Concrete Contractors	6-10	Database Search	IOC, VOC, SOC
133	Bus Lines	6-10	Database Search	VOC, SOC
134	Trucking-Heavy Hauling	6-10	Database Search	VOC, SOC
135	Textile Bags (Manufacturers)	6-10	Database Search	VOC
136	General Contractors	6-10	Database Search	IOC, VOC, SOC
137	Oils-Fuel (Wholesale)	6-10	Database Search	VOC, SOC
138	General Contractors	6-10	Database Search	IOC, VOC, SOC
139	Controls Systems/Regulators	6-10	Database Search	IOC, VOC, SOC

Site	Source Description ¹	TOT Zone (in years) ²	Source Information	Potential Contaminants ³
140	Cleaners	6-10	Database Search	VOC
141	Fertilizers (Wholesale)	6-10	Database Search	IOC
142	Gazebos	6-10	Database Search	IOC, VOC
143	Service Stations-Gasoline & Oil	6-10	Database Search	VOC, SOC
144	Metal Fabricators	6-10	Database Search	IOC, VOC
145	Truck-Dealers-Used	6-10	Database Search	VOC, SOC
146	Automobile Renting & Leasing	6-10	Database Search	VOC, SOC
147	Trucking-Heavy Hauling	6-10	Database Search	VOC, SOC
148	Coatings-Protective-Manufacturers	6-10	Database Search	VOC
149	Painters	6-10	Database Search	VOC
150	Electric Motors-Dlrs/Repairing (Wholesale)	6-10	Database Search	IOC, VOC
151	Hardware-Retail	6-10	Database Search	IOC, VOC, SOC
152	Agricultural Chemicals (Wholesale)	6-10	Database Search	IOC, SOC
153	Automobile Repairing & Service	6-10	Database Search	IOC, VOC, SOC
154	Aircraft Servicing & Maintenance	6-10	Database Search	IOC, VOC, SOC
155	Movers	6-10	Database Search	VOC, SOC
156	Grain-Dealers (Wholesale)	6-10	Database Search	IOC
157	Service Stations-Gasoline & Oil	6-10	Database Search	VOC, SOC
158	Paving Contractors	6-10	Database Search	VOC, SOC
159	Engines-Diesel (Wholesale)	6-10	Database Search	VOC, SOC
160	Automobile Dealers-Used Cars	6-10	Database Search	VOC, SOC
161	Automobile Renting & Leasing	6-10	Database Search	VOC, SOC
162	Oils-Fuel (Wholesale)	6-10	Database Search	VOC, SOC
163	Service Industry Machinery (Manufacturers)	6-10	Database Search	VOC, SOC
164	Painters	6-10	Database Search	VOC
165	Trucking-Motor Freight	6-10	Database Search	VOC, SOC
166	Automobile Body-Repairing & Painting	6-10	Database Search	IOC, VOC, SOC
167	Animal Shelters	6-10	Database Search	IOC
168	Boat Dealers	6-10	Database Search	VOC, SOC
169	Automobile Parts & Supplies-Retail	6-10	Database Search	VOC, SOC
170	Automobile Customizing	6-10	Database Search	IOC, VOC, SOC
171	Tools-Electric (Wholesale)	6-10	Database Search	IOC, VOC
172	Snowmobiles	6-10	Database Search	VOC, SOC
173	General Contractors	6-10	Database Search	IOC, VOC, SOC
174	Gas Companies	6-10	Database Search	VOC, SOC
175	Demolition Contractors	6-10	Database Search	IOC, VOC, SOC
176	Storage-Household & Commercial	6-10	Database Search	IOC, VOC, SOC
177	Automobile Repairing & Service	6-10	Database Search	IOC, VOC, SOC
178	Home Builders	6-10	Database Search	IOC, VOC, SOC
179	Automobile Parts & Supplies-Retail	6-10	Database Search	VOC, SOC
180	Campgrounds	6-10	Database Search	IOC, VOC, SOC
181	Asphalt & Asphalt Products	6-10	Database Search	IOC, VOC, SOC
182	Movers	6-10	Database Search	VOC, SOC
183	House & Building Movers	6-10	Database Search	VOC, SOC
184	Veterinarians	6-10	Database Search	IOC, VOC
185	Painters	6-10	Database Search	VOC
186	Automobile Repairing & Service	6-10	Database Search	IOC, VOC, SOC
187	Trailers-Horse (Wholesale)	6-10	Database Search	VOC, SOC
188	Landscape Contractors	6-10	Database Search	IOC, VOC, SOC
189	Automobile Renting & Leasing	6-10	Database Search	VOC, SOC
190	Movers	6-10	Database Search	VOC, SOC
191	X-Ray Laboratories-Industrial	6-10	Database Search	IOC, VOC, SOC

Site	Source Description ¹	TOT Zone (in years) ²	Source Information	Potential Contaminants ³
192	General Contractors	6-10	Database Search	IOC, VOC, SOC
193	Photographers-Portrait	6-10	Database Search	VOC
194	General Contractors	6-10	Database Search	IOC, VOC, SOC
195	Building Contractors	6-10	Database Search	IOC, VOC, SOC
196	Automobile Parts & Supplies-Retail	6-10	Database Search	VOC, SOC
197	Carpet & Rug Cleaners	6-10	Database Search	VOC
198	Electric Equipment & Supplies-Wholesale	6-10	Database Search	IOC, VOC
199	Photographers-Portrait	6-10	Database Search	VOC
200	Automobile Renting & Leasing	6-10	Database Search	VOC, SOC
201	Laboratories-Dental	6-10	Database Search	IOC, VOC, SOC
202	Lawn Mowers	6-10	Database Search	VOC, SOC
203	Laboratories-Testing	6-10	Database Search	IOC, VOC, SOC
204	Aircraft Charter Rental & Leasing	6-10	Database Search	VOC, SOC
205	Dairies	6-10	Database Search	IOC
206	Automobile Renting & Leasing	6-10	Database Search	VOC, SOC
207	Movers	6-10	Database Search	VOC, SOC
208	Hardware-Retail	6-10	Database Search	IOC, VOC, SOC
209	Truck-Repairing & Service	6-10	Database Search	IOC, VOC, SOC
210	Truck Renting & Leasing	6-10	Database Search	VOC, SOC
211	Excavating Contractors	6-10	Database Search	IOC, VOC, SOC
212	Contractors-Equipment/Supplies/Dealers	6-10	Database Search	IOC, VOC, SOC
213	Screen Printing	6-10	Database Search	VOC
214	Storage-Household & Commercial	6-10	Database Search	IOC, VOC, SOC
215	Automobile Dealers-Used Cars	6-10	Database Search	VOC, SOC
216	Veterinarians	6-10	Database Search	IOC, VOC
217	Car Washing & Polishing	6-10	Database Search	IOC, VOC, SOC
218	Storage-Household & Commercial	6-10	Database Search	IOC, VOC, SOC
219	Automobile-Antique & Classic	6-10	Database Search	VOC, SOC
220	Automobile Dealers-Used Cars	6-10	Database Search	VOC, SOC
221	Government-Forestry Services	6-10	Database Search	VOC, SOC
222	Cleaners	6-10	Database Search	VOC
223	Landscape Contractors	6-10	Database Search	IOC, VOC, SOC
224	Delivery Service	6-10	Database Search	VOC, SOC
225	Buses-Charter & Rental	6-10	Database Search	VOC, SOC
226	Tree Service	6-10	Database Search	VOC, SOC
227	Recycling Centers (Wholesale)	6-10	Database Search	IOC, VOC, SOC
228	Automobile Repairing & Service	6-10	Database Search	IOC, VOC, SOC
229	State Government-Transportation	6-10	Database Search	VOC, SOC
230	Pile Driving Equipment (Manufacturers)	6-10	Database Search	VOC, SOC
231	Truck Renting & Leasing	6-10	Database Search	VOC, SOC
232	Federal Government-National Security	6-10	Database Search	VOC, SOC
233	Truck-Repairing & Service	6-10	Database Search	IOC, VOC, SOC
234	Excavating Contractors	6-10	Database Search	IOC, VOC, SOC
235	Machine Shops	6-10	Database Search	IOC, VOC, SOC
236	Disinfectants & Germicides (Wholesale)	6-10	Database Search	IOC, VOC, SOC
237	Recycling Centers (Wholesale)	6-10	Database Search	IOC, VOC, SOC
238	Transmissions-Automobile	6-10	Database Search	IOC, VOC, SOC
239	Trucking-Heavy Hauling	6-10	Database Search	VOC, SOC
240	Service Stations-Gasoline & Oil	6-10	Database Search	VOC, SOC
241	Automobile Dealers-Used Cars	6-10	Database Search	VOC, SOC

Site	Source Description ¹	TOT Zone (in years) ²	Source Information	Potential Contaminants ³
242	Welding Equipment & Supplies (Wholesale)	6-10	Database Search	IOC, VOC
243	Storage-Household & Commercial	6-10	Database Search	IOC, VOC, SOC
244	Metalworking Machinery (Manufacturers)	6-10	Database Search	IOC, VOC
245	Snowmobiles	6-10	Database Search	VOC, SOC
246	Tree Service	6-10	Database Search	VOC, SOC
247	Leather Gloves & Mittens (Manufacturers)	6-10	Database Search	VOC
248	NPDES Site	6-10	Database Search	IOC
249	Toxic Release Inventory	6-10	Database Search	VOC, SOC
250	RCRA Site	6-10	Database Search	SOC
251	RCRA Site	6-10	Database Search	IOC, VOC, SOC
252	RCRA Site	6-10	Database Search	IOC, VOC, SOC
253	RCRA Site	6-10	Database Search	IOC, VOC, SOC
254	RCRA Site	6-10	Database Search	VOC, SOC
255	RCRA Site	6-10	Database Search	IOC, VOC, SOC
256	RCRA Site	6-10	Database Search	VOC, SOC
257	RCRA Site	6-10	Database Search	IOC, VOC, SOC
258	RCRA Site	6-10	Database Search	IOC, VOC, SOC
259	RCRA Site	6-10	Database Search	VOC, SOC
260	RCRA Site	6-10	Database Search	IOC, VOC, SOC
261	Mine/Quarry	6-10	Database Search	IOC, VOC, SOC
262	Mine/Quarry	6-10	Database Search	IOC, VOC, SOC
263	Mine/Quarry	6-10	Database Search	IOC, VOC, SOC
264	Mine/Quarry	6-10	Database Search	IOC, VOC, SOC
265	Mine/Quarry	6-10	Database Search	IOC, VOC, SOC
266	Mine/Quarry	6-10	Database Search	IOC, VOC, SOC
267	Deep Injection Well	6-10	Database Search	IOC, VOC, SOC
268	Deep Injection Well	6-10	Database Search	IOC, VOC, SOC
269	Deep Injection Well	6-10	Database Search	IOC, VOC, SOC
270	Deep Injection Well	6-10	Database Search	IOC, VOC, SOC
271	Deep Injection Well	6-10	Database Search	IOC, VOC, SOC
272	Deep Injection Well	6-10	Database Search	IOC, VOC, SOC
273	Deep Injection Well	6-10	Database Search	IOC, VOC, SOC
274	Deep Injection Well	6-10	Database Search	IOC, VOC, SOC
275	Deep Injection Well	6-10	Database Search	IOC, VOC, SOC
276	Deep Injection Well	6-10	Database Search	IOC, VOC, SOC
277	Deep Injection Well	6-10	Database Search	IOC, VOC, SOC
278	Deep Injection Well	6-10	Database Search	IOC, VOC, SOC
279	Deep Injection Well	6-10	Database Search	IOC, VOC, SOC
280	Deep Injection Well	6-10	Database Search	IOC, VOC, SOC
281	Deep Injection Well	6-10	Database Search	IOC, VOC, SOC
282	Deep Injection Well	6-10	Database Search	IOC, VOC, SOC
283	Deep Injection Well	6-10	Database Search	IOC, VOC, SOC
284	Deep Injection Well	6-10	Database Search	IOC, VOC, SOC
285	Deep Injection Well	6-10	Database Search	IOC, VOC, SOC
286	Deep Injection Well	6-10	Database Search	IOC, VOC, SOC
287	Deep Injection Well	6-10	Database Search	IOC, VOC, SOC
288	Deep Injection Well	6-10	Database Search	IOC, VOC, SOC
289	Deep Injection Well	6-10	Database Search	IOC, VOC, SOC
290	Deep Injection Well	6-10	Database Search	IOC, VOC, SOC
291	Deep Injection Well	6-10	Database Search	IOC, VOC, SOC

Site	Source Description ¹	TOT Zone (in years) ²	Source Information	Potential Contaminants ³
292	Deep Injection Well	6-10	Database Search	IOC, VOC, SOC
293	Deep Injection Well	6-10	Database Search	IOC, VOC, SOC
294	Deep Injection Well	6-10	Database Search	IOC, VOC, SOC
295	Deep Injection Well	6-10	Database Search	IOC, VOC, SOC
296	Deep Injection Well	6-10	Database Search	IOC, VOC, SOC
297	Deep Injection Well	6-10	Database Search	IOC, VOC, SOC
298	Deep Injection Well	6-10	Database Search	IOC, VOC, SOC
299	SARA Site	6-10	Database Search	IOC, VOC, SOC
300	SARA Site	6-10	Database Search	IOC, VOC, SOC
301	SARA Site	6-10	Database Search	IOC, VOC, SOC
302	SARA Site	6-10	Database Search	VOC, SOC
303	SARA Site	6-10	Database Search	VOC, SOC
304	SARA Site	6-10	Database Search	VOC, SOC
305	SARA Site	6-10	Database Search	VOC, SOC
306	SARA Site	6-10	Database Search	IOC, VOC, SOC
307	SARA Site	6-10	Database Search	IOC, VOC, SOC
308	SARA Site	6-10	Database Search	VOC, SOC
309	SARA Site	6-10	Database Search	VOC, SOC
310	SARA Site	6-10	Database Search	VOC, SOC
311	SARA Site	6-10	Database Search	IOC, VOC, SOC
312	SARA Site	6-10	Database Search	IOC, VOC, SOC
313	SARA Site	6-10	Database Search	IOC, VOC, SOC
314	SARA Site	6-10	Database Search	VOC, SOC
315	SARA Site	6-10	Database Search	IOC, SOC
316	SARA Site	6-10	Database Search	IOC, VOC, SOC
317	Recharge Point	6-10	Database Search	IOC, VOC, SOC
318	Recharge Point	6-10	Database Search	IOC, VOC, SOC
319	Recharge Point	6-10	Database Search	IOC, VOC, SOC
320	Recharge Point	6-10	Database Search	IOC, VOC, SOC
321	Recharge Point	6-10	Database Search	IOC, VOC, SOC
322	Recharge Point	6-10	Database Search	IOC, VOC, SOC
323	Recharge Point	6-10	Database Search	IOC, VOC, SOC
324	Recharge Point	6-10	Database Search	IOC, VOC, SOC
325	Recharge Point	6-10	Database Search	IOC, VOC, SOC
326	AST Site	6-10	Database Search	VOC, SOC
327	AST Site	6-10	Database Search	VOC, SOC
328	AST Site	6-10	Database Search	VOC, SOC

¹ SARA = Superfund Amendments and Reauthorization Act, RCRA = Resource Conservation Recovery Act, CERCLA = Comprehensive Environmental Response Compensation and Liability Act, UST = underground storage tank, LUST = leaking underground storage tank, AST = aboveground storage tank

² TOT = time-of-travel (in years) for a potential contaminant to reach the wellhead,

³ IOC = inorganic chemical, VOC = volatile organic chemical, SOC = synthetic organic chemical

Attachment B

City of Blackfoot Delineation Maps and Potential Contaminant Source Locations

Attachment C

City of Blackfoot Susceptibility Analysis Worksheets

The final scores for the susceptibility analysis were determined using the following formulas:

- 1) VOC/SOC/IOC Final Score = Hydrologic Sensitivity + System Construction + (Potential Contaminant/Land Use x 0.222)

For Well # 3 and Well #5

- 1) VOC/SOC/IOC Final Score = Hydrologic Sensitivity + System Construction + (Potential Contaminant/Land Use x 0.2)
- 2) Microbial Final Score = Hydrologic Sensitivity + System Construction + (Potential Contaminant/Land Use x 0.375)

Final Susceptibility Scoring:

- 0 - 5 Low Susceptibility
- 6 - 12 Moderate Susceptibility
- ≥ 13 High Susceptibility

1. System Construction		SCORE			
Drill Date	1/1/1920				
Driller Log Available	YES				
Sanitary Survey (if yes, indicate date of last survey)	YES	1998			
Well meets IDWR construction standards	NO	1			
Wellhead and surface seal maintained	YES	0			
Casing and annular seal extend to low permeability unit	NO	2			
Highest production 100 feet below static water level	NO	1			
Well located outside the 100 year flood plain	YES	0			
Total System Construction Score		4			
2. Hydrologic Sensitivity					
Soils are poorly to moderately drained	NO	2			
Vadose zone composed of gravel, fractured rock or unknown	YES	1			
Depth to first water > 300 feet	NO	1			
Aquitard present with > 50 feet cumulative thickness	NO	2			
Total Hydrologic Score		6			
3. Potential Contaminant / Land Use - ZONE 1A		IOC Score	VOC Score	SOC Score	Microbial Score
Land Use Zone 1A	IRRIGATED CROPLAND	2	2	2	2
Farm chemical use high	YES	2	0	2	
IOC, VOC, SOC, or Microbial sources in Zone 1A	YES	NO	NO	NO	YES
Total Potential Contaminant Source/Land Use Score - Zone 1A		4	2	4	2
Potential Contaminant / Land Use - ZONE 1B					
Contaminant sources present (Number of Sources)	YES	8	9	7	6
(Score = # Sources X 2) 8 Points Maximum		8	8	8	8
Sources of Class II or III leacheable contaminants or	YES	10	9	1	
4 Points Maximum		4	4	1	
Zone 1B contains or intercepts a Group 1 Area	NO	0	0	0	0
Land use Zone 1B Greater Than 50% Irrigated Agricultural Land		4	4	4	4
Total Potential Contaminant Source / Land Use Score - Zone 1B		16	16	13	12
Potential Contaminant / Land Use - ZONE II					
Contaminant Sources Present	NO	0	0	0	
Sources of Class II or III leacheable contaminants or	YES	1	0	0	
Land Use Zone II Greater Than 50% Irrigated Agricultural Land		2	2	2	
Potential Contaminant Source / Land Use Score - Zone II		3	2	2	0
Cumulative Potential Contaminant / Land Use Score		23	20	19	14
4. Final Susceptibility Source Score		15	14	14	13
5. Final Well Ranking		High	High	High	High

1. System Construction		SCORE			
Drill Date	4/1/54				
Driller Log Available	YES				
Sanitary Survey (if yes, indicate date of last survey)	YES	1998			
Well meets IDWR construction standards	NO	1			
Wellhead and surface seal maintained	YES	0			
Casing and annular seal extend to low permeability unit	NO	2			
Highest production 100 feet below static water level	YES	0			
Well located outside the 100 year flood plain	YES	0			
Total System Construction Score		3			
2. Hydrologic Sensitivity					
Soils are poorly to moderately drained	NO	2			
Vadose zone composed of gravel, fractured rock or unknown	YES	1			
Depth to first water > 300 feet	NO	1			
Aquitard present with > 50 feet cumulative thickness	YES	0			
Total Hydrologic Score		4			
3. Potential Contaminant / Land Use - ZONE 1A		IOC Score	VOC Score	SOC Score	Microbial Score
Land Use Zone 1A	IRRIGATED CROPLAND	2	2	2	2
Farm chemical use high	YES	2	0	2	
IOC, VOC, SOC, or Microbial sources in Zone 1A	NO	NO	NO	NO	NO
Total Potential Contaminant Source/Land Use Score - Zone 1A		4	2	4	2
Potential Contaminant / Land Use - ZONE 1B					
Contaminant sources present (Number of Sources)	YES	11	11	9	8
(Score = # Sources X 2) 8 Points Maximum		8	8	8	8
Sources of Class II or III leacheable contaminants or	YES	13	11	1	
4 Points Maximum		4	4	1	
Zone 1B contains or intercepts a Group 1 Area	NO	0	0	0	0
Land use Zone 1B Greater Than 50% Irrigated Agricultural Land		4	4	4	4
Total Potential Contaminant Source / Land Use Score - Zone 1B		16	16	13	12
Potential Contaminant / Land Use - ZONE II					
Contaminant Sources Present	YES	2	2	2	
Sources of Class II or III leacheable contaminants or	YES	1	1	1	
Land Use Zone II Greater Than 50% Irrigated Agricultural Land		2	2	2	
Potential Contaminant Source / Land Use Score - Zone II		5	5	5	0
Cumulative Potential Contaminant / Land Use Score		25	23	22	14
4. Final Susceptibility Source Score		12	12	11	12
5. Final Well Ranking		Moderate	Moderate	Moderate	Moderate

1. System Construction		SCORE			
Drill Date	9/16/64				
Driller Log Available	YES				
Sanitary Survey (if yes, indicate date of last survey)	YES	1998			
Well meets IDWR construction standards	NO	1			
Wellhead and surface seal maintained	YES	0			
Casing and annular seal extend to low permeability unit	NO	2			
Highest production 100 feet below static water level	YES	0			
Well located outside the 100 year flood plain	YES	0			
Total System Construction Score		3			
2. Hydrologic Sensitivity					
Soils are poorly to moderately drained	NO	2			
Vadose zone composed of gravel, fractured rock or unknown	YES	1			
Depth to first water > 300 feet	NO	1			
Aquitard present with > 50 feet cumulative thickness	NO	2			
Total Hydrologic Score		6			
3. Potential Contaminant / Land Use - ZONE 1A		IOC Score	VOC Score	SOC Score	Microbial Score
Land Use Zone 1A	IRRIGATED CROPLAND	2	2	2	2
Farm chemical use high	YES	2	0	2	
IOC, VOC, SOC, or Microbial sources in Zone 1A	YES	NO	YES	NO	NO
Total Potential Contaminant Source/Land Use Score - Zone 1A		4	2	4	2
Potential Contaminant / Land Use - ZONE 1B					
Contaminant sources present (Number of Sources)	YES	19	31	28	6
(Score = # Sources X 2) 8 Points Maximum		8	8	8	8
Sources of Class II or III leacheable contaminants or	YES	21	31	14	
4 Points Maximum		4	4	4	
Zone 1B contains or intercepts a Group 1 Area	YES	0	2	0	0
Land use Zone 1B Greater Than 50% Irrigated Agricultural Land		4	4	4	4
Total Potential Contaminant Source / Land Use Score - Zone 1B		16	18	16	12
Potential Contaminant / Land Use - ZONE II					
Contaminant Sources Present	YES	2	2	2	
Sources of Class II or III leacheable contaminants or	YES	1	1	1	
Land Use Zone II 25 to 50% Irrigated Agricultural Land		1	1	1	
Potential Contaminant Source / Land Use Score - Zone II		4	4	4	0
Potential Contaminant / Land Use - ZONE III					
Contaminant Source Present	YES	1	1	1	
Sources of Class II or III leacheable contaminants or	YES	1	1	1	
Is there irrigated agricultural lands that occupy > 50% of	YES	1	1	1	
Total Potential Contaminant Source / Land Use Score - Zone III		3	3	3	0
Cumulative Potential Contaminant / Land Use Score		27	27	27	14
4. Final Susceptibility Source Score		14	14	14	14
5. Final Well Ranking					
		High	High	High	High

1. System Construction		SCORE			
Drill Date	5/30/74				
Driller Log Available	YES				
Sanitary Survey (if yes, indicate date of last survey)	YES	1998			
Well meets IDWR construction standards	NO	1			
Wellhead and surface seal maintained	YES	0			
Casing and annular seal extend to low permeability unit	NO	2			
Highest production 100 feet below static water level	YES	0			
Well located outside the 100 year flood plain	YES	0			
Total System Construction Score		3			
2. Hydrologic Sensitivity					
Soils are poorly to moderately drained	NO	2			
Vadose zone composed of gravel, fractured rock or unknown	YES	1			
Depth to first water > 300 feet	NO	1			
Aquitard present with > 50 feet cumulative thickness	NO	2			
Total Hydrologic Score		6			
3. Potential Contaminant / Land Use - ZONE 1A		IOC Score	VOC Score	SOC Score	Microbial Score
Land Use Zone 1A	IRRIGATED CROPLAND	2	2	2	2
Farm chemical use high	YES	2	0	2	
IOC, VOC, SOC, or Microbial sources in Zone 1A	YES	NO	YES	YES	NO
Total Potential Contaminant Source/Land Use Score - Zone 1A		4	2	4	2
Potential Contaminant / Land Use - ZONE 1B					
Contaminant sources present (Number of Sources)	YES	27	46	43	15
(Score = # Sources X 2) 8 Points Maximum		8	8	8	8
Sources of Class II or III leacheable contaminants or	YES	25	46	6	
4 Points Maximum		4	4	4	
Zone 1B contains or intercepts a Group 1 Area	YES	0	0	2	0
Land use Zone 1B Greater Than 50% Irrigated Agricultural Land		4	4	4	4
Total Potential Contaminant Source / Land Use Score - Zone 1B		16	16	18	12
Potential Contaminant / Land Use - ZONE II					
Contaminant Sources Present	YES	2	2	2	
Sources of Class II or III leacheable contaminants or	YES	1	1	1	
Land Use Zone II Greater Than 50% Irrigated Agricultural Land		2	2	2	
Potential Contaminant Source / Land Use Score - Zone II		5	5	5	0
Potential Contaminant / Land Use - ZONE III					
Contaminant Source Present	YES	1	1	1	
Sources of Class II or III leacheable contaminants or	YES	1	1	1	
Is there irrigated agricultural lands that occupy > 50% of	YES	1	1	1	
Total Potential Contaminant Source / Land Use Score - Zone III		3	3	3	0
Cumulative Potential Contaminant / Land Use Score		28	26	30	14
4. Final Susceptibility Source Score		15	14	15	14
5. Final Well Ranking		High	High	High	High

1. System Construction		SCORE			
Drill Date	4/25/83				
Driller Log Available	YES				
Sanitary Survey (if yes, indicate date of last survey)	YES	1998			
Well meets IDWR construction standards	NO	1			
Wellhead and surface seal maintained	NO	1			
Casing and annular seal extend to low permeability unit	NO	2			
Highest production 100 feet below static water level	YES	0			
Well located outside the 100 year flood plain	YES	0			
Total System Construction Score		4			
2. Hydrologic Sensitivity					
Soils are poorly to moderately drained	NO	2			
Vadose zone composed of gravel, fractured rock or unknown	YES	1			
Depth to first water > 300 feet	NO	1			
Aquitard present with > 50 feet cumulative thickness	YES	0			
Total Hydrologic Score		4			
3. Potential Contaminant / Land Use - ZONE 1A		IOC Score	VOC Score	SOC Score	Microbial Score
Land Use Zone 1A	IRRIGATED CROPLAND	2	2	2	2
Farm chemical use high	YES	2	0	2	
IOC, VOC, SOC, or Microbial sources in Zone 1A	YES	YES	YES	YES	YES
Total Potential Contaminant Source/Land Use Score - Zone 1A		4	2	4	2
Potential Contaminant / Land Use - ZONE 1B					
Contaminant sources present (Number of Sources)	YES	38	68	62	100
(Score = # Sources X 2) 8 Points Maximum		8	8	8	8
Sources of Class II or III leacheable contaminants or	YES	30	68	11	
4 Points Maximum		4	4	4	
Zone 1B contains or intercepts a Group 1 Area	YES	0	2	0	0
Land use Zone 1B Greater Than 50% Irrigated Agricultural Land		4	4	4	4
Total Potential Contaminant Source / Land Use Score - Zone 1B		16	18	16	12
Potential Contaminant / Land Use - ZONE II					
Contaminant Sources Present	YES	2	2	2	
Sources of Class II or III leacheable contaminants or	YES	1	1	1	
Land Use Zone II Greater Than 50% Irrigated Agricultural Land		2	2	2	
Potential Contaminant Source / Land Use Score - Zone II		5	5	5	0
Potential Contaminant / Land Use - ZONE III					
Contaminant Source Present	YES	1	1	1	
Sources of Class II or III leacheable contaminants or	YES	1	1	1	
Is there irrigated agricultural lands that occupy > 50% of	YES	1	1	1	
Total Potential Contaminant Source / Land Use Score - Zone III		3	3	3	0
Cumulative Potential Contaminant / Land Use Score		28	28	28	14
4. Final Susceptibility Source Score		14	14	14	13
5. Final Well Ranking		High	High	High	High

1. System Construction		SCORE			
Drill Date	1/27/99				
Driller Log Available	YES				
Sanitary Survey (if yes, indicate date of last survey)	YES	0			
Well meets IDWR construction standards	NO	1			
Wellhead and surface seal maintained	YES	0			
Casing and annular seal extend to low permeability unit	NO	2			
Highest production 100 feet below static water level	YES	0			
Well located outside the 100 year flood plain	YES	0			
Total System Construction Score		3			
2. Hydrologic Sensitivity					
Soils are poorly to moderately drained	NO	2			
Vadose zone composed of gravel, fractured rock or unknown	YES	1			
Depth to first water > 300 feet	NO	1			
Aquitard present with > 50 feet cumulative thickness	NO	2			
Total Hydrologic Score		6			
3. Potential Contaminant / Land Use - ZONE 1A		IOC Score	VOC Score	SOC Score	Microbial Score
Land Use Zone 1A	IRRIGATED CROPLAND	2	2	2	2
Farm chemical use high	YES	2	0	2	
IOC, VOC, SOC, or Microbial sources in Zone 1A	YES	NO	YES	YES	YES
Total Potential Contaminant Source/Land Use Score - Zone 1A		4	2	4	2
Potential Contaminant / Land Use - ZONE 1B					
Contaminant sources present (Number of Sources)	YES	16	10	10	8
(Score = # Sources X 2) 8 Points Maximum		8	8	8	8
Sources of Class II or III leacheable contaminants or	YES	19	10	7	
4 Points Maximum		4	4	4	
Zone 1B contains or intercepts a Group 1 Area	YES	0	0	2	0
Land use Zone 1B Greater Than 50% Irrigated Agricultural Land		4	4	4	4
Total Potential Contaminant Source / Land Use Score - Zone 1B		16	16	18	12
Potential Contaminant / Land Use - ZONE II					
Contaminant Sources Present	YES	2	2	2	
Sources of Class II or III leacheable contaminants or	YES	1	1	1	
Land Use Zone II Greater Than 50% Irrigated Agricultural Land		2	2	2	
Potential Contaminant Source / Land Use Score - Zone II		5	5	5	0
Potential Contaminant / Land Use - ZONE III					
Contaminant Source Present	YES	1	1	1	
Sources of Class II or III leacheable contaminants or	YES	1	1	1	
Is there irrigated agricultural lands that occupy > 50% of	YES	1	1	1	
Total Potential Contaminant Source / Land Use Score - Zone III		3	3	3	0
Cumulative Potential Contaminant / Land Use Score		28	26	30	14
4. Final Susceptibility Source Score		15	14	15	14
5. Final Well Ranking		High	High	High	High

1. System Construction		SCORE			
Drill Date	6/11/01				
Driller Log Available	YES				
Sanitary Survey (if yes, indicate date of last survey)	NO	0			
Well meets IDWR construction standards	NO	1			
Wellhead and surface seal maintained	YES	0			
Casing and annular seal extend to low permeability unit	NO	2			
Highest production 100 feet below static water level	YES	0			
Well located outside the 100 year flood plain	YES	0			
Total System Construction Score		3			
2. Hydrologic Sensitivity					
Soils are poorly to moderately drained	NO	2			
Vadose zone composed of gravel, fractured rock or unknown	NO	0			
Depth to first water > 300 feet	NO	1			
Aquitard present with > 50 feet cumulative thickness	YES	0			
Total Hydrologic Score		3			
3. Potential Contaminant / Land Use - ZONE 1A		IOC Score	VOC Score	SOC Score	Microbial Score
Land Use Zone 1A	IRRIGATED CROPLAND	2	2	2	2
Farm chemical use high	YES	2	0	2	
IOC, VOC, SOC, or Microbial sources in Zone 1A	NO	NO	NO	NO	NO
Total Potential Contaminant Source/Land Use Score - Zone 1A		4	2	4	2
Potential Contaminant / Land Use - ZONE 1B					
Contaminant sources present (Number of Sources)	YES	80	133	116	27
(Score = # Sources X 2) 8 Points Maximum		8	8	8	8
Sources of Class II or III leacheable contaminants or	YES	65	133	26	
4 Points Maximum		4	4	4	
Zone 1B contains or intercepts a Group 1 Area	YES	0	2	0	0
Land use Zone 1B Greater Than 50% Irrigated Agricultural Land		4	4	4	4
Total Potential Contaminant Source / Land Use Score - Zone 1B		16	18	16	12
Potential Contaminant / Land Use - ZONE II					
Contaminant Sources Present	YES	2	2	2	
Sources of Class II or III leacheable contaminants or	YES	1	1	1	
Land Use Zone II Greater Than 50% Irrigated Agricultural Land		2	2	2	
Potential Contaminant Source / Land Use Score - Zone II		5	5	5	0
Potential Contaminant / Land Use - ZONE III					
Contaminant Source Present	YES	1	1	1	
Sources of Class II or III leacheable contaminants or	YES	1	1	1	
Is there irrigated agricultural lands that occupy > 50% of	YES	1	1	1	
Total Potential Contaminant Source / Land Use Score - Zone III		3	3	3	0
Cumulative Potential Contaminant / Land Use Score		28	28	28	14
4. Final Susceptibility Source Score		12	12	12	11
5. Final Well Ranking		Moderate	Moderate	Moderate	Moderate

1. System Construction		SCORE			
Drill Date	8/18/01				
Driller Log Available	YES				
Sanitary Survey (if yes, indicate date of last survey)	NO	0			
Well meets IDWR construction standards	NO	1			
Wellhead and surface seal maintained	YES	0			
Casing and annular seal extend to low permeability unit	NO	2			
Highest production 100 feet below static water level	YES	0			
Well located outside the 100 year flood plain	YES	0			
Total System Construction Score		3			
2. Hydrologic Sensitivity					
Soils are poorly to moderately drained	NO	2			
Vadose zone composed of gravel, fractured rock or unknown	YES	1			
Depth to first water > 300 feet	NO	1			
Aquitard present with > 50 feet cumulative thickness	NO	2			
Total Hydrologic Score		6			
3. Potential Contaminant / Land Use - ZONE 1A		IOC Score	VOC Score	SOC Score	Microbial Score
Land Use Zone 1A	IRRIGATED CROPLAND	2	2	2	2
Farm chemical use high	YES	2	0	2	
IOC, VOC, SOC, or Microbial sources in Zone 1A	NO	NO	NO	NO	NO
Total Potential Contaminant Source/Land Use Score - Zone 1A		4	2	4	2
Potential Contaminant / Land Use - ZONE 1B					
Contaminant sources present (Number of Sources)	YES	12	8	7	10
(Score = # Sources X 2) 8 Points Maximum		8	8	8	8
Sources of Class II or III leacheable contaminants or	YES	16	8	5	
4 Points Maximum		4	4	4	
Zone 1B contains or intercepts a Group 1 Area	YES	0	0	2	0
Land use Zone 1B Greater Than 50% Irrigated Agricultural Land		4	4	4	4
Total Potential Contaminant Source / Land Use Score - Zone 1B		16	16	18	12
Potential Contaminant / Land Use - ZONE II					
Contaminant Sources Present	YES	2	2	2	
Sources of Class II or III leacheable contaminants or	YES	1	1	1	
Land Use Zone II 25 to 50% Irrigated Agricultural Land		1	1	1	
Potential Contaminant Source / Land Use Score - Zone II		4	4	4	0
Potential Contaminant / Land Use - ZONE III					
Contaminant Source Present	YES	1	1	1	
Sources of Class II or III leacheable contaminants or	YES	1	1	1	
Is there irrigated agricultural lands that occupy > 50% of	YES	1	1	1	
Total Potential Contaminant Source / Land Use Score - Zone III		3	3	3	0
Cumulative Potential Contaminant / Land Use Score		27	25	29	14
4. Final Susceptibility Source Score		14	14	15	14
5. Final Well Ranking		High	High	High	High